

BLOOD AND BLOOD COMPONENTS TRANSFUSION POLICY

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Document Control

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Document objectives: The purpose of this policy is to ensure that staff undertaking any part of the transfusion process are trained and competent to do so and that the procedures from receipt to administration are adhered to at all times. This scope of the policy includes blood transfusions and platelet transfusions.			
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Committee/Group Consulted: Community Hospital Best Practice Group, District Nurse best Practice Group; Ambulatory Care Group; Clinical Policy Review Group			
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1. INTRODUCTION

The transfusion of Blood and Blood products carry a significant risk if not performed according to national guidelines.

The most recent NICE guidance focusses on thresholds and targets for haemoglobin levels and consideration of alternative therapies.

2. PURPOSE AND SCOPE

The purpose of this policy is to ensure staff have access to the most up to date guidance regarding the transfusion procedure, ensuring the administration of blood and blood products is as safe as possible for patients.

The scope of the policy includes transfusions of red cells and platelets.

3. DUTIES AND RESPONSIBILITIES

- 3.1 The **Chief Executive** is ultimately responsible for ensuring the Trust complies with legal requirements and national recommendations for the safe administration of blood and blood components.
- 3.2 The **Trust Board** has a responsibility to ensure training is available to all relevant staff and that competency assessment is available via the clinical practice team as required. This responsibility is delegated to the Director of Nursing and Patient Safety.
- 3.3 The **Director of Nursing and Patient Safety** is the Lead Director responsible for the implementation and the Chair of the Clinical Governance Group who will monitor this policy and will ensure it is updated at least every three years or sooner according to changes in local or national guidance.
- 3.4 **Acute providers of blood products** are responsible for reporting to SABRE (Serious Adverse Blood Reactions and Events) and must be informed by the nurse in charge immediately at the time of the event.
- 3.5 **Registered nurses** have a duty of care to the patient and must adhere to the standards set in this policy at all times.
- 3.6 Registered Nurses are Accountable for any delegation of duty related to this policy and must ensure health care assistants are competent and confident to undertake any delegated task.
- 3.7 **Unregistered staff** who take part in any part of the blood transfusion process must familiarise themselves with the relevant Trust procedures relating to blood and blood components transfusion and undertake relevant competency assessment. They are accountable to the trust and must report to the registered nurse if they are not able to undertake any delegated duty.

- 3.8 The **Senior Nurse for Clinical Practice** will collate all training and competency information relating to Blood Transfusion. This information is reported to the Clinical Governance Group quarterly as an exception report. The **Senior Nurse for Clinical Practice** will also attend meetings of the Blood Transfusion Committee of the supplying organisation.

Prescribers of blood and blood products will ensure they have considered NICE guidance (NG24), in particular the thresholds and targets appropriate for the patient.

4. EXPLANATIONS OF TERMS USED

- 4.1 **Blood or platelet transfusion** - the transfer of blood or blood components from one person (the donor) into the bloodstream of another person (the recipient).
- 4.2 Blood components include platelets.
- 4.3 **Compatibility** – Ability of two or more systems or their components to work together without modification.
- 4.4 **SABRE** - Serious Adverse Blood Reactions and Events.
- 4.5 **Giving set** – Fluid administration apparatus, usually including the plastic bag containing the mixture to be infused and a long, flexible plastic tube.
- 4.6 **Traceability** - The Blood Safety and Quality Regulations (BSQR) 2005 require Trusts to ensure all blood components are traceable from donor to recipient in 100% transfusions of blood and plasma components. The MHRA (Medicines and Healthcare products Regulatory Agency) are the inspection body enforcing this law. Non-compliance can result in prosecution of the responsible officer

5. STATEMENT OF POLICY AND GUIDANCE

Prescribing of Blood and Blood Products

Prior to prescribing blood or blood components, the prescriber must consider:

- Thresholds and targets appropriate to the patient's condition.
- The environment the transfusion is to be given in e.g. an ambulatory care or inpatient setting, as this will influence the number of units that may be administered
- The number of units to be transfused. Nice guidance recommends single unit red blood cell transfusions, followed by checking haemoglobin; and single units of platelets, followed by checking platelet count.

Prescription of diuretics if a risk of fluid overload

The indication for prescribing blood or blood components must be recorded in the patient's record by the prescriber.

See Appendix A for details of the prescription.

Consent

Prescribers must gain consent from the patient for transfusion of blood or blood products and document this within the patient's records. When seeking consent, the prescriber must ensure the patient fully understands the information being given to them; Patients must be made aware of the risks & benefits of transfusion This may necessitate the use of a professional interpreter to ensure they are able to give informed consent (in line with the Professional Interpreter and Translation Services Policy). Where the patient lacks capacity the principles of working in the patients' best interest must apply. Please see the Consent and Capacity to Consent Policy for more information. Any discussions about consent must be documented in the patient's notes.

The registered nurse administering the transfusion must also check the patient understands the need for transfusion and the risks involved, including symptoms that should be reported during the infusion, and that they continue to consent to the treatment. Any concerns must be immediately communicated to the prescriber.

The patient must be given the information leaflets; 'Having a Blood Transfusion' and 'Post transfusion' advice leaflet available on the intranet.

Environment for Blood and Blood Product Transfusion

Transfusions must only be given in clinical areas where

- Patients can be readily observed for possible reactions
- Resuscitation facilities are available including an AED and anaphylaxis treatment.

Sample collection and pre-transfusion testing

Prior to ordering red blood cells for a patient, a sample of blood must be taken from the patient to check blood group and screening for antibodies, to ensure appropriate blood is transfused. This is the sample validity process.

This sample is valid for between 72 hours to 7 days prior to transfusion depending on patient and the acute Trust that provides the blood. (Check the transfusion form for details).

The member of staff who obtains the blood sample must be trained and competent in venipuncture as well as the transfusion process.

See Appendix A for the process for taking the blood sample

Administration: Checking Procedure for Blood and Blood Components

Blood and blood components are extremely hazardous and the procedure in appendix A **must** be followed when checking them.

Documentation

Specific details of documentation of the transfusion process are outlined in Appendix A.

Adverse reactions or events must be reported using the DATIX Risk Management Reporting system. The Risk Team will ensure that the blood bank responsible for supplying the blood has reported to SHOT (Serious Hazards of Transfusion) (Blood Safety and Quality Regulations, 2005 ³) via SABRE (an electronic reporting tool) (HSC 2002 ⁴).

Escorting Patients

When a patient with a blood transfusion leaves the ward for any reason, a nurse competent to monitor a patient receiving a transfusion must accompany them.

6. TRAINING REQUIREMENTS

6.1 Training for blood transfusion is mandatory for some roles and must be repeated every two years. Please see Appendix F for more details.

For **Registered Nurses** to be competent at blood transfusions, they must first;

- Be appropriately trained and assessed as competent in
 - Intravenous drug administration,
 - Medicines management
 - Drug calculations
 - Medical Devices
- Have completed anaphylaxis training

They must then complete the blood transfusion eLearning training delivered by the Training Department, and be assessed as competent in all the relevant competency assessments located under competencies on the training website. See Appendix F, for details.

Staff collecting blood must complete the appropriate e-learning package and ensure they are familiar with procedures for checking blood fridges.

Staff taking blood samples for cross matching must

- Be trained and competent in venipuncture, including taking a blood sample for transfusion
- Complete the appropriate e-learning package and be assessed as competent in obtaining a venous sample for transfusion. See appendix F for details

A centrally held database (Electronic Staff Record) that records training will be held by Learning and Development and will be accessible to the key assessors.

Records of staff completing competencies in blood and blood components procedures must be maintained by the Line Manager of each clinical area.

All key assessors must be adequately trained and assessed as competent in each area of practice and hold a recognised teaching and assessing qualification, in line with the Assessing Competency in Clinical Practice Policy. The Clinical Skills Facilitators are available to assess staff and should be contacted when required.

7. EQUALITY IMPACT ASSESSMENT

- 7.1 All relevant persons are required to comply with this document and must demonstrate sensitivity and competence in relation to the nine protected characteristics as defined by the Equality Act 2010. In addition, the Trust has identified Learning Disabilities as an additional tenth protected characteristic. If you, or any other groups, believe you are disadvantaged by anything contained in this document please contact the Equality and Diversity Lead who will then actively respond to the enquiry.

8. MONITORING COMPLIANCE AND EFFECTIVENESS

Staff must complete a DATIX following any adverse event or practice that is not supported by this policy, relating to the transfusion of blood or blood components. It will be necessary to inform the supplying provider of the blood or blood component when there has been an adverse reaction to the blood or blood component. This may necessitate further investigation and reporting to NHS Blood Transfusion or the MHRA.

The acute Trusts that supply blood and blood products must ensure that they have accurate records of the patients that have received those products. Each acute Trust has a process that must be followed, which is detailed in Appendix A. They monitor traceability continuously and will report any issues with compliance to the Senior Nurse for Clinical Practice.

Any resulting local actions, recommendations and further learning will be discussed with the clinical team involved. Any Trustwide actions, recommendations and further learning will be discussed at the appropriate Best Practice Groups. The Transfusion Improvement action plan will be led by the Senior Nurse for Clinical Practice and is reported to the Clinical Governance Group quarterly. Any additional learning or support outside the current training provided will be facilitated by the Clinical Practice Team.

9. COUNTER FRAUD

- 9.1 The Trust is committed to the NHS Protect Counter Fraud Policy – to reduce fraud in the NHS to a minimum, keep it at that level and put funds stolen by fraud back into patient care. Therefore, consideration has been given to the inclusion of guidance with regard to the potential for fraud and corruption to occur and what action should be taken in such circumstances during the development of this procedural document.

10. RELEVANT CARE QUALITY COMMISSION (CQC) REGISTRATION STANDARDS

10.1 Under the **Health and Social Care Act 2008 (Regulated Activities) Regulations 2014 (Part 3)**, the fundamental standards which inform this procedural document, are set out in the following regulations:

Regulation 9:	Person-centred care
Regulation 10:	Dignity and respect
Regulation 11:	Need for consent
Regulation 12:	Safe care and treatment
Regulation 13:	Safeguarding service users from abuse and improper treatment
Regulation 14:	Meeting nutritional and hydration needs
Regulation 15:	Premises and equipment
Regulation 16:	Receiving and acting on complaints
Regulation 17:	Good governance
Regulation 18:	Staffing
Regulation 19:	Fit and proper persons employed
Regulation 20:	Duty of candour
Regulation 20A:	Requirement as to display of performance assessments.

10.2 Under the **CQC (Registration) Regulations 2009 (Part 4)** the requirements which inform this procedural document are set out in the following regulations:

Regulation 16:	Notification of death of service user
Regulation 18:	Notification of other incidents

10.3 Detailed guidance on meeting the requirements can be found at <http://www.cqc.org.uk/sites/default/files/20150311%20Guidance%20for%20providers%20on%20meeting%20the%20regulations%20FINAL%20FOR%20PUBLISHING.pdf>

11. REFERENCES, ACKNOWLEDGEMENTS AND ASSOCIATE DOCUMENTS

Murphy et al, 1999 The Administration of blood and blood components and the management of transfused patients *Transfusion Medicine*, **9**, 227-238 Blackwell Science Ltd.

Handbook of Transfusion Medicine (2007) 4th Edition
www.transfusionguidelines.org.uk

Blood Safety and Quality Regulations (2005) Sabre- a user guide UK
Implementation of the EU Blood Safety Directive MHRA

Health Service Circular (2002) Better Blood Transfusion Appropriate Use of Blood HSC 2002/009

National Patient Safety Agency (Nov, 2006) Right patient, right blood Safer practice Notice 14

See 'Healthcare Competence – Obtaining a venous blood sample November 2006' for further information @ <http://www.npsa.nhs.uk/patientsafety/alerts-and-directives/notices/blood-transfusions>

NICE (2015) Transfusion: Assessment and Management of Blood Transfusion NG24

Other Literature

Health Service Circular (1998) Better Blood Transfusion HSC 1998/224

UK Blood Safety and Quality Regulations (2005) Implementation of the EU Blood Safety Directive

MHRA Background and Guidance on reporting Serious Adverse Events and Serious Adverse Reactions

The Blood Safety and Quality Regulations (2005) *Statutory Instrument 2005 No.50*

Council Directive (2001) Amended proposal for a directive of the European Parliament and of the Council setting standards of quality and safety for the collection, testing, processing, storage, and distribution of human blood and blood components and amending 89/281/EEC

Chief Medical Officer/National Patient Safety Agency (2006) Implementation of competencies for blood transfusions National Blood Transfusion Committee

NPSA Safer Practice Notice 24 Standardising wristbands improves patient safety

Alert number 24 Health Service Circular (2007) Better Blood Transfusion: Safe and appropriate use of Blood, November Series No. HSC 2007/00/Gateway reference 9058.

11.2 Cross reference to other procedural documents

Record Keeping and Records Management Policy
Consent and Capacity to Consent to Examination and Treatment Policy
Development and Management of Procedural Documents
Hand Hygiene Policy
Infection Prevention and Control Policy
Learning and Development and Mandatory Training Policy
Medical Devices Policy
Patient Identification Policy
Physiological Observations for Inpatients Policy
Risk Management Strategy
Staff Training Matrix (Training Needs Analysis)
Training Prospectus
Untoward Event Reporting Policy and Procedure

11.3 All current policies and procedures are accessible in the policy section of the public website (on the home page, click on 'Policies and Procedures'). Trust Guidance is accessible to staff on the Trust Intranet.

12 APPENDICES

Appendix A: Standard Operating Procedure for Blood and Blood Components

Appendix B: Contact Details for the Transfusion Practitioners

Appendix C: Management of Transfusion Reactions

Appendix D: Instructions for Royal United Hospital Bath - Traceability System

Appendix E: Guidelines for the transfusion of platelets

Appendix F: Training and Competency Requirements by Role

Standard Operating Procedure for Blood and Blood Components

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1. OBTAINING THE BLOOD SAMPLE FOR PRE-TRANSFUSION TESTS

1.1 Laboratory Request Form

This form must be completed by a Registered Nurse or Doctor. An addressograph label may be used. The person taking the blood sample **must** sign, time and date the request form. The form must include the following;

- Patient's surname and forename
- Date of birth
- Gender
- Hospital number, where available. (Must have either hospital or NHS number)
- Ward/ department/address
- Date
- Number and type of component required
- Date and time required
- Reasons for request and patients diagnosis
- Last transfusion and past obstetric history if known

Failure to comply with the minimum data requirements on the request form will result in the request being rejected and may cause delay in components being available for transfusion.

1.2 Patient Identification

When taking the blood sample, the patient must be identified by asking them to state their name and date of birth. (Do not ask 'are you ... 'patient's name)'). For inpatients: the wristband must be checked that it matches the request form. Follow the patient identification policy for identification of patients who are confused or unconscious.

1.3 Blood Sample

The blood sample bottle **must** be hand written beside the patient.

The blood sample bottle must be labelled immediately AFTER blood withdrawal, and must never be pre labelled. Labelling must be completed for one patient before moving on to the next.

The sample must be completed with the following minimum data:
Addressographs **must not** be used.

- Patient's surname and forename
- Gender
- Date of birth
- Hospital number or NHS number
- Date and time sample collected
- Signature or initial of person taking sample

The form and sample is then sent to the laboratory via courier or designated transport.

2. PRESCRIPTION SHEET

The prescription is the responsibility of the requesting clinician using the trust approved documentation. This must be included in the patient's record. The following data must be included:

- Patient's surname and forename
- Date of birth and hospital number
- Location,
- Gender of patient
- Date of transfusion
- The blood component required with the number or units or volume
- Any special requirements, for example, gamma irradiated components, cmv negative components
- Period of infusion
- Special instructions/ medication required before or during transfusion
- Signature of prescriber

3. TRANSPORT AND STORAGE OF BLOOD (NOT PLATELETS)

Once requested, the prescribed number of units will be transported to the appropriate Somerset Partnership site. On arrival, the blood must be immediately transferred from the transport box to the designated blood fridge. Any unused, complete units of blood must be returned to the blood bank.

If the receiving blood fridge isn't working then the blood may remain in the transport box until it is required, for a maximum of 4 hours. Only one unit may be transported at a time in this situation. Once the seal on the transport box is broken, the transfusion **must** be started within 30 minutes.

4. COLLECTING BLOOD FROM THE BLOOD FRIDGE (NOT PLATELETS)

Prior to removing blood from the blood fridge, the member of staff must positively identify the patient who is to receive the blood or blood product using agreed identifiers (as per Identification Policy), this must be checked against the prescription chart.

Ensure the transfusion will be completed within the sample validity date and time, as recorded on the issue form

The blood (blood group and unit number) must be checked with:

- the details on the blood transfusion issue form;
- the details on the blood label attached to the unit

Withdrawals of blood from the fridge must be documented including the name of the staff member and date and time the blood was removed.

The blood transfusion must be commenced as soon as possible after the blood is removed from the fridge. If it is left out of the fridge for more than 30 minutes, without being used, the blood must not be used, and must be returned to the blood bank for disposal.

5. MAINTENANCE AND CHECKING OF BLOOD FRIDGE

The temperature of the blood fridge **must** be recorded daily, by the nurse in charge of the ward. The temperature must be maintained at 4 degrees centigrade (+/-2 degrees).

Blood fridges must be cleaned and their contents checked in accordance with the acute hospital supplier's guidance.

Annual mapping and calibration **must** be carried out by the Trust's contracted company. It is the responsibility of the matron for each area to ensure this is completed as a declaration of compliance is reported annually to the MHRA.

6. TRANSFUSION PROCEDURE FOR BLOOD AND PLATELETS

Blood and blood components must be independently checked and administration commenced by two competent health care workers one of whom must be a Registered Nurse.

Please refer to Appendix E for guidelines on platelet infusions.

The registered nurse must check that the prescriber has correctly written the prescription as set out in section 5.1, ensuring it is clear and understandable, not out of date and has not been cancelled and the signature is clearly identifiable.

6.1 The Patient Check

The Registered Nurse must:

Ensure the patient fully understands the need for transfusion and the risks involved, including symptoms that should be reported during the infusion. or if they lack capacity, the prescriber has documented that the transfusion is in the patient's best interests. The patient information leaflet "Having a Blood Transfusion" should have been given to the patient prior to this. All patients need to be informed that they have received a transfusion.

- check the patient's history of allergy to blood components Ensure the patient is wearing an identification wristband (please refer to the patient identification policy for more information), "No wristband, no transfusion"

- Contact the prescriber if there are any concerns about the prescription/consent/allergies, before the transfusion is commenced.
- Ensure the patient has patent venous access

The following information must be checked at the bedside **immediately** prior to transfusion. Two health care staff competent in the relevant transfusion processes, one of whom must be a registered nurse must check the following information. If checking is interrupted the whole process must be restarted:

- patients surname and forename both verbally and by checking the patient's wristband
- date of birth
- NHS number

Check the name, blood group, expiry date, and any special requirements of the patient (for example irradiated, CMV negative) on the blood label. These details must then be checked against the patient's wristband, and the prescription. The details must **all** be identical.

Any discrepancy in the information must be reported **immediately** to the relevant Blood Bank. A member of the staff from the blood bank will be available out of hours.

The Nurse responsible for checking and administering of blood and blood components must ensure that the blood is checked visually before starting the transfusion for:

- consistency in colour
- no clots or leaks in the bag
- turbidity of plasma or clumping of red cells

All transfusions must be administered with a blood giving set and administration pump. Ensure a new giving set is used for platelets every time (Appendix E).

The administration of the blood or the blood product must be commenced by the Registered Nurse.

The patient must be advised to report **IMMEDIATELY** any adverse signs such as:

- shortness of breath
- generally feeling hot or unwell
- itching
- loin pain or generalised pain

Any prescribed pre-medication e.g. hydrocortisone, chlorphenamine or furosemide must be administered as prescribed on the MAR chart or equivalent.

The start time of transfusion and time of completion of any previous units must be recorded on the appropriate record and prescription chart. The blood transfusion issue form and blood transfusion prescription sheet must be completed and signed.

Any contra-indications or change in the patient's clinical condition that may require the blood or blood components to be withheld must be documented, and immediate medical advice sought should the unplanned withholding of the blood or blood product be indicated.

6.2 **Observation**

Before starting the transfusion, a baseline set of observations must be recorded on the physiological observation chart and a NEWs score assigned. On the commencement of each unit the patient's observations must be recorded after 15 minutes, then on completion of each unit.

Where there is a history of allergic reaction to blood or blood components the nurse must be extra vigilant in observing the patient's condition. A reaction is most likely to occur within the first 15 minutes.

Any adverse reactions must be reported to a doctor **immediately** and the transfusion stopped. Physiological observations must continue to be recorded and the patient monitored closely.

If a transfusion reaction is suspected the Blood Transfusion department at the appropriate District General Hospital must be contacted. See Appendix C for Management of Transfusion Reactions. A DATIX must also be completed.

Monitor rate of flow to ensure transfusion progresses as prescribed.

7. **IMPORTANT INFORMATION**

7.1 **Medications**

Drugs or additives must never be introduced directly into blood or blood product bags or transfusion lines.

Where drugs or additives are required to be given using the same intravenous cannula as a blood transfusion, this may only be achieved using a 3-way tap or similar device and flushing with 0.9% sodium chloride before and after the drug or additive.

7.2 **Administration sets for transfusing blood and blood components**

A new giving set must be used after a transfusion has run for more than 12 hours or after 3 units of blood whichever is sooner.

A new giving set must be used if another intravenous infusion is commenced after the blood transfusion. A new giving set must be used to transfuse platelets.

7.3 Infusion rates

Red cells – According to clinical need, but usually 2 to 3 hours per unit in the hemodynamically stable patient. Each unit **must** be completed within 4 hours from the time it was removed from the fridge.

Platelets – According to clinical need, but usually 30 minutes per unit.

8 DISPOSAL OF BLOOD AND BLOOD PRODUCT BAGS AND TRACEABILITY PROCESS

It is a legal requirement that all blood and blood component transfusions are 'traceable' from the donor to the recipient. Therefore the relevant documentation **must** be returned to the acute Trust blood bank following a transfusion.

	Taunton and Somerset NHS Foundation	Royal United Hospital, Bath	Yeovil District Hospital
Disposal of bags	In an appropriate sized sulo bin or clinical waste bag	In an appropriate sized sulo bin or clinical waste bag	Plug the open port on the bag then double bag, in the resealable plastic bag the unit came in, and return to YDH
Traceability Process	Send signed traceability/compatibility form to laboratory Both copies of the issue form (the pink form) must be returned to the lab	The attached blood/blood product label must be signed and sent to the lab (See Appendix D)	Send signed traceability/compatibility form to laboratory

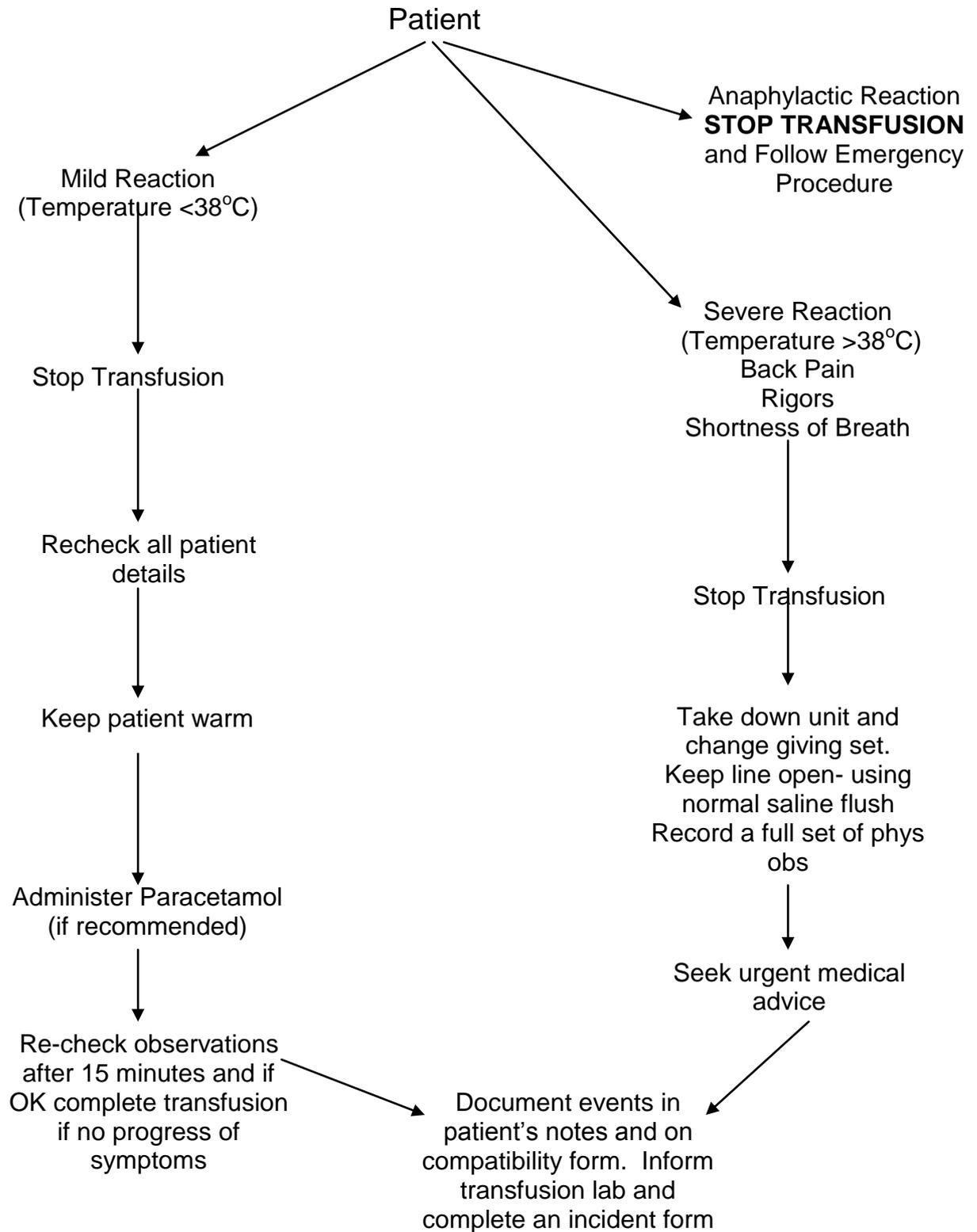
8.1 Returning blood bags following an adverse reaction

When a transfusion has been stopped because of an adverse reaction, the blood bag and giving set must be returned to the Blood Bank in a sealable plastic bag. Spigot or close off the giving set to avoid leaks and leave attached to the blood bag. If necessary, store the blood bag and giving set in an appropriate place in the clinical area, clearly labelled, until the sealable bag is available. Large sealable plastic bags can be obtained from the Blood Bank duty technician. Blood bags should be returned in the same way as laboratory specimens. Blood bags must not be returned in the ordinary internal mail.

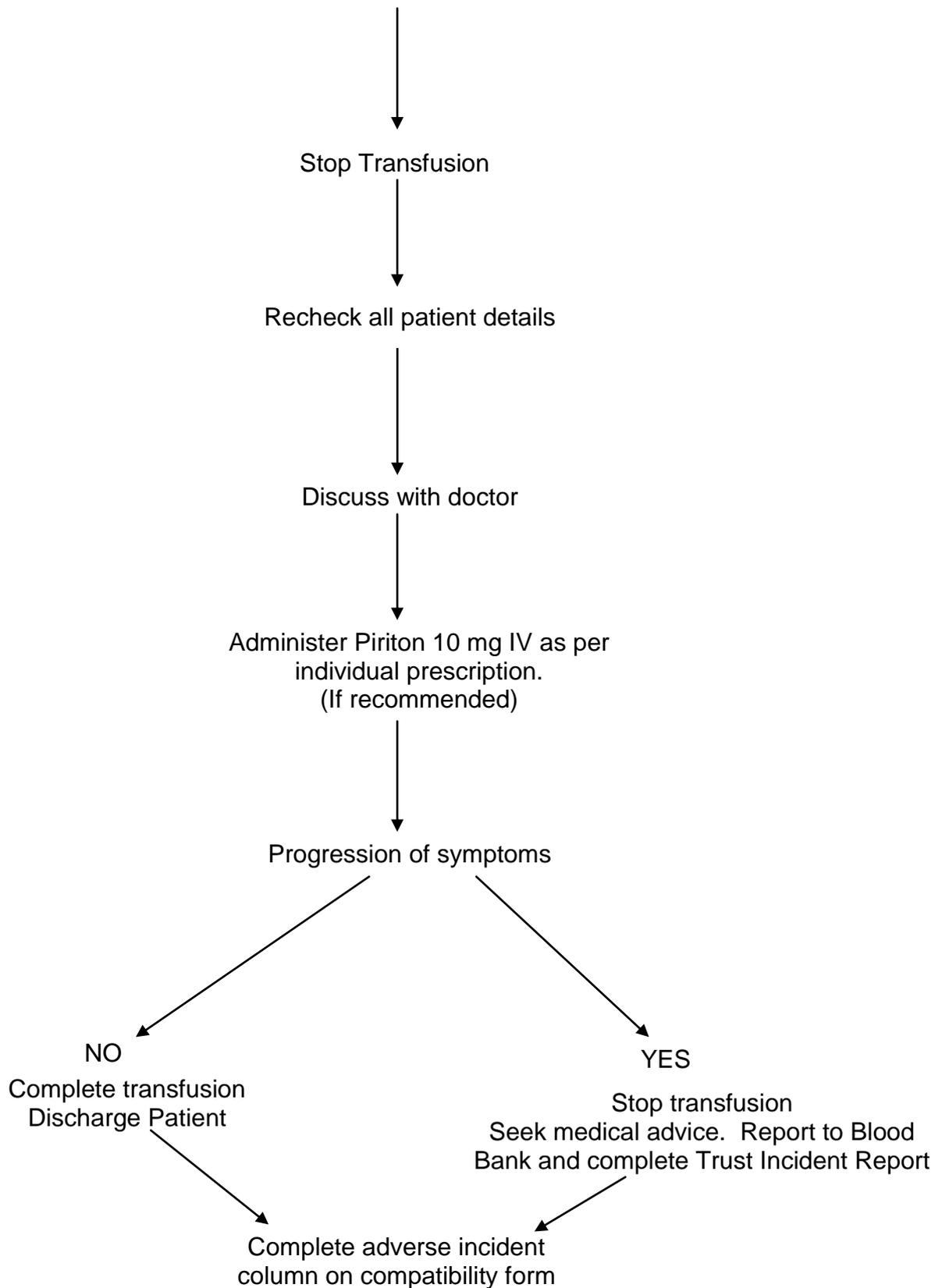
Contact Details for the Transfusion Practitioners

Taunton & Somerset NHS Foundation Trust	Alison Timmins	01823 342279 (ext.2279) Bleep 2291
Yeovil District Hospital	Alison Hill	07867 653061
Royal United Hospital	Helen Maria	01225 821134 Bleep 7841

MANAGEMENT OF TRANSFUSION REACTIONS



MANAGEMENT OF URTICARIAL REACTIONS



INSTRUCTIONS FOR ROYAL UNITED HOSPITAL, BATH TRACEABILITY SYSTEM

On ce transfusion of bag finished, post to RUH Blood Bank, Bath as soon as possible

1 Tag attached to top of bag by blood bank

4

TEAR OFF AND RETURN TO TRANSFUSION LABORATORY

THIS LABEL MUST NOT BE ALTERED

Donation No.G052 505 123 456 X... Group...AB+.....

SUITABLE FOR

.....SMITH, JOHN.....

.....01/01/1950.....

Unit No.1234567.....Group. AB+

Ward...ED..... Date..01/01/08 Initials...LR

Do not add other medication to the BLOOD-PACK ROYAL UNITED
Mix blood thoroughly immediately before use HOSPITAL
Transfusion set must have a filter BATH
IDENTIFY RECIPIENT AS PARTNER TO CROSSMATCH

2 Compatibility label affixed to tag. No label stuck on bag

PLEASE COMPLETE SECTION BELOW

I confirm that the above patient received this blood/component

3

Print Name.....

Signature..... Ward.....

Time completed..... Date.....

This section to be completed by member of staff who administered the transfusion

When this blood/component has been transfused and the section above completed, it is a LEGAL REQUIREMENT that this label is returned to the Transfusion Laboratory

GUIDELINES ON PLATELET INFUSION

ADMINISTRATION

Transfusion checks are the same as a red cell transfusion – see appendix A

All blood components must be visually inspected for pack integrity and colouration prior to transfusion. Check that platelet packs do not show clumping or appear more cloudy than usual. If you have any doubts, **DO NOT TRANSFUSE** and contact the transfusion laboratory for advice.

The infusion must be started as soon as possible after the pack is received. Platelets must never be stored outside the laboratory..

Platelets must be administered through **a normal blood administration set** (with a 170-200 micron filter) and **compatible infusion pump**. Use a fresh set when administering each bag of platelets.

PLATELETS MUST NOT TO BE INFUSED VIA GRAVITY PLATELET SPECIFIC GIVING SETS

Platelets must not be transfused through an administration set that has previously been used for red cells or other blood components as this may cause aggregation and retention of platelets in the line.

Infuse over a period of 30 to 60 minutes.

Record the patient's physiological observations **before, then after the first 15 minutes and at the end of the infusion.**

Once the infusion is completed, dispose of the giving set and infusion bag according to local requirements.

Ensure the patient is given the Post Transfusion Advice Leaflet

CAUTIONS AND REACTIONS

Plasma in the platelets can cause an ABO incompatibility reaction, transfusion-related acute-lung injury (TRALI) or allergic reaction

A number of reactions may follow platelet transfusions. They are the same as those which can occur after the transfusion of red cell concentrates:

- febrile reactions
- urticarial reactions
- anaphylactic reactions
- reaction to a bacterially contaminated unit.

Refer to appendix C for the treatment of transfusion related reactions

References

BCSH recommendations (1999)

McCelland DBL (2004) "Hand Book of Transfusion Medicine" 4th Edition

Blood Transfusion Training and Competency Requirements by Role

Role	Training	Competency
Phlebotomy or any staff undertaking blood sampling for blood transfusion	eLearning – entirety to understand the transfusion process and the need for ensuring the right blood in the right bottle.	Obtaining a blood sample
Porters and HCAs undertaking fridge checking	eLearning - section in training specifically around fridge monitoring	Fridge competencies http://10.146.208.210/QPulseDocumentService/Documents.svc/documents/active/attachment?number=TXS39
Non registered staff involved in all aspects of the transfusion process	eLearning – entirety	Specific competencies for non-registered staff: BDS 21: http://intranet.tsft.nhs.uk/portals/pathology/Pathology/Transfusion/BD21%20taunton%20competence%20assessment%20for%202nd%20checker.pdf http://intranet.tsft.nhs.uk/portals/pathology/Pathology/Transfusion/BD21%20taunton%20competency%20framework%20for%202nd%20checker.pdf
Registered Nurses involved in all aspects of the transfusion process	eLearning - entirety	All sections of the competency: <ul style="list-style-type: none"> • BDS17: Organise the receipt of blood/blood products for transfusion • BDS18: Collect blood/blood components for transfusion • BDS19: Prepare to administer transfusion of blood/blood products to patients • BDS20: Administer a transfusion of blood/blood products