



Blood Transfusion Training Workbook 2010

(Originally adapted from Gloucestershire Hospitals NHS Foundation Trust)

Name:

Date of Birth (compulsory):

Staff Grade:

Ward / Department:

Directorate:

Hospital:

*(Also available for download from the
North Bristol NHS Trust Blood Transfusion Website...
http://homepage/ERD/Staff_Development/Blood_Policies/
(click on blue link-bar for workbook)*

User Notes

Bi-annual blood transfusion training is mandatory for all staff involved in the blood transfusion process.

Non-medical staff:

Initial / induction training requires attendance at a formal blood transfusion training session run by Staff Development or the Transfusion Practitioners. If you have not attended a formal training session in the last two years, please contact Anne Leighfield in the Staff Development Department at SMH on ext 8309 to book yourself onto the next available course.

If you have recently attended a formal training session and require an update, you may either attend a formal taught update session or you may complete this workbook. Both forms of training are based around the North Bristol NHS Trust Blood Transfusion Policy (CP2a). To book on an update course, please contact Anne Leighfield in the Staff Development Department at SMH on ext 8309.

All staff:

This workbook package contains 13 topic areas, each of which are relevant to different groups of staff. The table below indicates which topics are relevant to which profession. In order to fulfil the requirement for bi-annual training, all topic areas relevant to your staff grade must be completed. For each topic, most answers are available from the North Bristol NHS Trust Blood Transfusion Policy (CP2a) or from the NBT Blood Transfusion Website...

(http://homepage/ERD/Staff_Development/Blood_Policies/).

Each section of the workbook should take a maximum of 10 minutes to complete. Upon completion of ALL relevant sections, the workbook must be returned to Karen Mead, Haematology Dept, Frenchay. If the workbook has been completed satisfactorily (75% or more of the questions answered correctly), a certificate will be sent to you for your continual professional development portfolios, and your completion of bi-annual blood transfusion training will be logged on your Managed Learning Environment by Staff Development.

If you have any difficulties completing any of the sections, please e-mail or contact Karen Mead or Veronica Sansom at Southmead on Ext 8356 / 8354.

Section	Topic	Nurse	Doctor	ODP	Porter / clerk	HCA	Phlebotomist	Pre-op Nurse
1	Obtaining consent	No	Yes	No	No	No	No	Yes
2	Prescription	No	Yes	No	No	No	No	No
3	Request for transfusion	No	Yes	No	No	No	No	Yes
4	Taking a blood sample	Yes	Yes	No	No	Yes	Yes	Yes
5	Pre-collection procedure	Yes	Yes	Yes	No	No	No	No
6	Collection of blood products	Yes	No	Yes	Yes	Yes	No	No
7	Preparing for transfusion	Yes	Yes	Yes	No	No	No	No
8	Administering a transfusion	Yes	Yes	Yes	No	No	No	No
9	Transfusion observations	Yes	No	Yes	No	Yes	No	No
10	Completion of transfusion	Yes	No	Yes	No	Yes	No	No
11	Appropriate use of blood	No	Yes	No	No	No	No	Yes

Section 1: Obtaining Consent

Question 1

Medical staff and specially trained pre-op assessment / surgical admission / satellite dialysis nurses are the only staff qualified to obtain consent for transfusion

True ☐ False ☐

Question 2

The risks and benefits of transfusion must be discussed and consent obtained (where possible) before blood components are prescribed

True ☐ False ☐

Question 3

The following patient information leaflets are available: (tick as appropriate)

- A ☐ Will I need a blood transfusion?
- B ☐ Platelet Transfusion – Information for Patients (NBT leaflet)
- C ☐ Receiving a plasma transfusion (for children)
- D ☐ Information for patients needing irradiated blood
- E ☐ Children receiving a blood transfusion - A parent's guide
- F ☐ Babies receiving a blood transfusion – A parent's guide
- G ☐ Iron in your diet

Question 4

The relevant patient information leaflet(s) should be given to every patient who may require transfusion of a blood component

True ☐ False ☐

Question 5

Consent (where possible) should be documented by the prescribing doctor (or specially trained nurse) on the following documentation: (tick as appropriate)

- A ☐ Fluid chart
- B ☐ Drug chart
- C ☐ Blood transfusion record
- D ☐ Consent form (for theatre)
- E ☐ All of the above

Question 6

If patient is unable to consent this should also be recorded on the Transfusion Record

True ☐ False ☐

Question 7

The Trust consent policy (CG07) provides guidance on compliance with the Mental Capacity Act 2005 where a patient may lack the capacity to consent

True ☐ False ☐

Question 8

The 'Treatment of Jehovah's Witnesses' policy (CG50) outlines management options for Jehovah's Witness patients who refuse blood transfusion

True ☐ False ☐

Section 2: Prescription

Question 1

Appropriate indications for transfusion are provided in the 'Clinical Indications for Transfusion Handbook' which is available from the NBT Blood Transfusion Website

True ☐ False ☐

Question 2

Blood components should only be prescribed when careful consideration has been given to alternatives and transfusion is still deemed necessary

True ☐ False ☐

Question 3

Blood components should be prescribed in the following place(s): (tick as appropriate)

- A ☐ Fluid chart
- B ☐ Drug chart
- C ☐ Blood transfusion record
- D ☐ Anaesthetic chart (in an emergency only)
- E ☐ Casualty record (in an emergency only)

Question 4

The justification for transfusion must be clearly documented on the Blood Transfusion Record

True ☐ False ☐

Question 5

The blood transfusion record should be used to document all relevant information relating to the blood transfusion episode

True ☐ False ☐

Question 6

The documentation used for prescription must be labelled with which patient identification: (tick one box only)

- A ☐ First name, surname, patient identification number, address
- B ☐ First name, surname, date of birth, patient identification number
- C ☐ First name, surname, age, address

Question 7

Prescription must specify which of the following: (tick as appropriate)

- A ☐ Product and amount
- B ☐ Date for infusion
- C ☐ Special requirements
- D ☐ Rate of infusion
- E ☐ Name and signature of prescribing doctor

Question 8

The prescribed rate of transfusion must not exceed 4 hours per unit of red blood cells

True ☐ False ☐

Section 3: Request for Transfusion

Question 1

Request forms can be completed by the following groups of staff: (tick as appropriate)

- A ☐ Medical Staff
- B ☐ Registered Nurses / Midwives
- C ☐ Specially trained Pre-Op Assessment / Surgical Admission Nurses
- E ☐ Operating Department Practitioners

Question 2

The request form must include patient forename, surname, DOB and unique ID number unless the patient is an unknown emergency patient

True ☐ False ☐

Question 3

An addressograph label cannot be used on a request form for patient ID purposes

True ☐ False ☐

Question 4

The request form should include which of the following information (tick as appropriate)

- A ☐ Quantity and type of blood components required
- B ☐ Date and time components required
- C ☐ Diagnosis and reason for request
- D ☐ Identity and signature of requestor
- E ☐ Indication of special requirements

Question 5

Telephone requests must be made by a doctor under normal circumstances

True ☐ False ☐

Question 6

The following NBT blood-ordering schedules (MSBOS) listing the maximum amount of blood that should be ordered for any particular elective surgical operation are available: (tick as appropriate)

- A ☐ Neurosurgery
- B ☐ General Surgery
- C ☐ Urology Surgery
- D ☐ Vascular Surgery
- E ☐ Transplant Surgery
- F ☐ Orthopaedic Surgery

Question 7

All MSBOS's are available for download from the NBT blood transfusion website

True ☐ False ☐

Section 4: Taking a Blood Sample

Question 1

Blood samples for transfusion investigation can be taken by any grade of healthcare staff if trained at NBT in phlebotomy and up to date with blood transfusion training

True ☐ False ☐

Question 2

Patients should be informed why the blood sample is required and provide verbal consent to the sampling procedure before the patient is bled

True ☐ False ☐

Question 3

To allow positive identification (where possible) you should state the patient forename, surname, date of birth and ask the patient to confirm these details are correct

True ☐ False ☐

Question 4

All patients admitted to the Trust and all patients unable to identify themselves MUST have an identification band on before a sample for transfusion investigation is taken

True ☐ False ☐

Question 5

Identification bands should be labelled in accordance with the patient identification policy (CP7g) and contain the following minimum patient ID: (tick as appropriate)

- A ☐ Forename
- B ☐ Surname
- C ☐ Patient identification number
- D ☐ Date of birth
- E ☐ Address
- F ☐ Gender

Question 6

Patient identification from the following sources need to match prior to taking the blood sample: (tick as appropriate)

- A ☐ Patient verbal identification (where possible)
- B ☐ Identification band (for admitted patients)
- C ☐ Transfusion request form
- D ☐ Observation chart

Question 7

The sample tube required for transfusion investigations is: (tick one box only)

- A ☐ Brown top serum gel tube
- B ☐ White top serum tube
- C ☐ Red top EDTA tube
- D ☐ Blue top coagulation tube
- E ☐ Green top heparin tube
- F ☐ Grey top fluoride tube

Question 8

The sample tube must be labelled before the blood sample is taken

True ☐

False ☐

Question 9

The sample tube should be labelled with the following details: (tick as appropriate)

A ☐ Patient forename

B ☐ Patient surname

C ☐ Patient date of birth

D ☐ Patient identification number

E ☐ Patient address

F ☐ Date and time of sample

G ☐ Signature of the person taking the sample

H ☐ Signature of the doctor requesting the transfusion

Question 10

The date and time and identity of person taking the blood sample should be recorded on the request form

True ☐

False ☐

Question 11

Addressograph labels are permitted on samples for blood transfusion investigations

True ☐

False ☐

Question 12

Any unsigned samples will not be processed by the Transfusion Department

True ☐

False ☐

Question 13

Samples should be labelled away from the patient bedside

True ☐

False ☐

Question 14

Labelling a transfusion sample with wrong information can result in death or serious harm to the patient

True ☐

False ☐

Question 15

All staff who take blood samples for transfusion investigation must complete bi-annual blood transfusion training and be competency assessed once every three years

True ☐

False ☐

Section 5: Pre-Collection Procedure

Question 1

Prior to collection, patient identification from the following sources should be checked by the person requesting collection: (tick as appropriate)

- A ☐ Patient verbal identification (where possible)
- B ☐ Patient identification band
- C ☐ Blood transfusion record
- D ☐ Observation chart
- E ☐ Fluid chart

Question 2

All patients requiring a blood transfusion must be wearing an identification band

True ☐ False ☐

Question 3

The blood transfusion record should be checked to ensure the following has been accurately and legibly documented: (tick as appropriate)

- A ☐ Patient consent to transfusion
- B ☐ Prescription
- C ☐ Daily fluid intake

Question 4

Baseline observations must be documented prior to requesting the collection of blood component(s)

True ☐ False ☐

Question 5

Baseline observations may be documented up to an hour before administration of the blood component(s)

True ☐ False ☐

Question 6

If baseline observations are outside of the expected range then the blood component(s) should be collected before medical advice sought

True ☐ False ☐

Question 7

A green cannula or above must be used for routine adult blood transfusion(s)

True ☐ False ☐

Question 8

The person requesting the collection of blood must ensure that the collector knows which fridge to go to, which products to collect and is up to date with training

True ☐ False ☐

Question 9

The person requesting the collection of blood must complete the Blood Transfusion Record to document: (tick as appropriate)

- A ☐ Date and time collection requested
- B ☐ Signature of person requesting the collection of blood component(s)

Section 6: Collection of Blood Products

Question 1

All staff who collect blood products from the Blood Bank / fridge must complete bi-annual blood transfusion training and be competency assessed once every three years

True ☐ False ☐

Question 2

The following appropriately trained staff may collect blood: (tick as appropriate)

- A ☐ Theatre Porters
- B ☐ Ward Clerks
- C ☐ Healthcare Assistants
- D ☐ Registered Nurses
- E ☐ Phlebotomists

Question 3

Which of the following is the minimum patient information that must be checked for transfusion purposes: (tick one box only)

- A ☐ Surname, age, address
- B ☐ Forename, surname, date of birth
- C ☐ Forename, surname, age, address
- D ☐ Forename, surname, date of birth, patient identification number
- E ☐ Forename, surname, age, address, patient identification number
- F ☐ Forename, surname, date of birth, address

Question 4

Which ward documentation containing patient identification should be taken from clinical areas to the Blood Bank / fridge for checking purposes: (tick one box only)

- A ☐ Addressograph label
- B ☐ Blood transfusion record card (A4 pink card)
- C ☐ Drug chart
- D ☐ Compatibility report form (A5 pink sheet issued with first unit of blood)
- E ☐ Fluid chart
- F ☐ Observation chart

Question 5

The red cell unit(s) should be taken out of the fridge before patient identification is checked on documentation from the clinical area and Blood Bank Register

True ☐ False ☐

Question 6

The red cell units should be taken in expiry date order (also the order printed on Blood Bank Register)

True ☐ False ☐

Question 7

Platelets should be collected from the fridge

True ☐ False ☐

Question 8

The fridge will alarm if the door is not closed properly or left open for too long

True ☐

False ☐

Question 9

The blood components should be checked for: (tick as appropriate)

A ☐ Expiry date

B ☐ Leaks and clots

C ☐ Discolouration

Question 10

The blood compatibility label should be checked against the ward documentation to ensure patient identification is the same on both

True ☐

False ☐

Question 11

The donation number on the blood compatibility label should be checked against the blood bag to ensure the right label has been attached to the right bag

True ☐

False ☐

Question 12

The Blood Bank register must be completed for each unit collected to document: (tick as appropriate)

A ☐ Date and time of collection

B ☐ Identity of person collecting the units

C ☐ Date and time the units were prescribed by the doctor

D ☐ Identity of the person who is caring for the patient

Question 13

If the emergency O negative blood is taken from the blood bank fridge the Transfusion Laboratory staff do not need to be informed

True ☐

False ☐

Question 14

Following collection of a blood component, transfusion must commence within: (tick one box only)

A ☐ 15 minutes

B ☐ 30 minutes

C ☐ 60 minutes

D ☐ 4 hours

Question 15

If transfusion is unlikely and blood has been out of the fridge for longer than the acceptable time limit, the unit should be returned to lab ASAP: (tick one box only)

True ☐

False ☐

Question 16

When the unit is taken to the clinical area, the receiver must sign the transfusion record and document the date and time the unit was received from the collector

True ☐

False ☐

Section 7: Preparing for Transfusion

Question 1

Upon delivery to clinical area, patient identification should be checked with the collector and receiver on the following documentation: (tick as appropriate)

- A ☐ Blood Transfusion Record
- B ☐ Fluid chart
- C ☐ Compatibility label on unit
- D ☐ Compatibility report form (A5 pink form from lab)
- E ☐ Observation chart

Question 2

Upon arrival in the clinical area, the blood must be transfused straight away or returned to the Blood Bank immediately

True ☐ False ☐

Question 3

The pre-administration checks must be performed by two registered members of staff

True ☐ False ☐

Question 4

The following documentation should be checked prior to administration: (tick as appropriate)

- A ☐ Prescription
- B ☐ Special blood requirements
- C ☐ Previous transfusion history
- D ☐ Patient consent to transfusion
- E ☐ Baseline observations

Question 5

Which of the following items should be checked to ensure that blood group and blood bag number are the same: (tick as appropriate)

- A ☐ Fluid chart
- B ☐ Compatibility report form
- C ☐ Compatibility label
- D ☐ Patient identification band
- E ☐ Blood unit

Question 6

The blood bag unit should be checked for: (tick as appropriate)

- A ☐ Special blood requirements (CMV, irradiated etc)
- B ☐ Rate of transfusion
- C ☐ Leaks, clots, discolouration
- D ☐ Blood donor details
- E ☐ Expiry date

Question 7

When carrying out pre-transfusion checks, it is vital that the relevant staff are not distracted or interrupted

True ☐

False ☐

Question 8

The final bedside check must compare patient identification on the patient wristband against that on the blood bag compatibility label and patient verbal identification

True ☐

False ☐

Question 9

If any discrepancy in patient identification is found, the transfusion should be started before the discrepancy is addressed

True ☐

False ☐

Question 10

Prior to administration, the pre-transfusion checklist on the blood transfusion record should be signed and dated to document that all pre-transfusion checks have been fully completed

True ☐

False ☐

Question 11

Patients should be informed of the potential side effects of transfusion which may include: (tick as appropriate)

A ☐ Shivering

B ☐ Itching

C ☐ Rash

D ☐ Flushing

E ☐ Shortness of breath

F ☐ Generally feeling unwell

Question 12

The NBT Infection Control policy must be adhered to at all times when preparing a patient for transfusion

True ☐

False ☐

Question 13

The staff personnel carrying out the pre-administration checks must sign and record date and time transfusion started on the pink A5 compatibility report form

True ☐

False ☐

Question 14

If any blood components are sent to another hospital during patient transfer, or if any blood products are received from another hospital with a patient, the blood transfusion department must be informed immediately

True ☐

False ☐

Question 15

All routine blood transfusions should be administered between 20.00 and 08.00 hours

True ☐

False ☐

Section 8: Administering a Transfusion

Question 1

For each unit transfused, the two members of staff responsible for the transfusion must sign and record date and transfusion start time on the compatibility label

True ☐

False ☐

Question 2

The traceability sticker from the compatibility label should be affixed to which documentation: (tick one box only)

A ☐ Pink Blood Transfusion Record

B ☐ Fluid chart

C ☐ Ward Blood Transfusion Register

D ☐ Observation chart

Question 3

The documentation containing the traceability stickers must be returned to the Transfusion Laboratory by hand on a weekly basis

True ☐

False ☐

Question 4

If part of a blood component is transfused and the rest is wasted, the unit must be documented as transfused on the traceability register and not as wasted

True ☐

False ☐

Question 5

The time of transfusion and volume transfused must be recorded on the fluid chart

True ☐

False ☐

Question 6

A single blood giving set can be used for up to twenty-four hours

True ☐

False ☐

Question 7

Platelets can be transfused through a giving set which has been used for red cells

True ☐

False ☐

Question 8

Red blood cell units should not be transfused for longer than two hours in total

True ☐

False ☐

Question 9

A standard blood giving set should be used when administering Red Blood Cells, Fresh Frozen Plasma and Cryoprecipitate

True ☐

False ☐

Question 10

Platelets should be transfused through a platelet specific giving set

True ☐

False ☐

Section 9: Transfusion Observations

Question 1

Observations can be undertaken by the following groups of staff: (tick as appropriate)

- A ☐ Registered Nurses / Midwives
- B ☐ Student Nurses / Midwives
- C ☐ Assistant Practitioners
- D ☐ Medical Staff
- E ☐ Operating Department Practitioners
- F ☐ All grades of Healthcare Assistants

Question 2

Most life-threatening reactions will occur: (tick one box only)

- A ☐ During the second unit
- B ☐ After 24 hours from the start of transfusion
- C ☐ Within 15 minutes from the start of transfusion
- D ☐ During the first unit
- E ☐ 1-2 hours into the transfusion

Question 3

Observations are the same for all transfusions regardless of which blood component is being transfused

True ☐ False ☐

Question 4

Temperature, pulse, blood pressure and respiratory rate must be recorded at which of the following times as a minimum: (tick as appropriate)

- A ☐ Prior to collecting the blood component(s)
- B ☐ Within 15 minutes of transfusion
- C ☐ At 30 minute intervals throughout transfusion
- D ☐ At appropriate intervals during the transfusion
- E ☐ Following completion of the blood unit

Question 5

Which of the following require observations to be taken earlier than 15 minutes: (tick as appropriate)

- A ☐ Patients over 50 years old
- B ☐ Unconscious patients
- C ☐ All surgical patients
- D ☐ During a rapid transfusion

Question 6

A temperature increase of more than 1°C may indicate a possible transfusion reaction

True ☐ False ☐

Question 7

All observations relating to a blood transfusion episode should be clearly documented as such on the routine observation chart

True ☐ False ☐

Section 10: Completion of Transfusion

Question 1

Blood giving sets should not be flushed through with saline after transfusion

True ☐

False ☐

Question 2

The giving set should be left in the bag after transfusion is completed

True ☐

False ☐

Question 3

The empty bag should be retained for 48 hours after the end of the transfusion episode

True ☐

False ☐

Question 4

The empty bag should be placed into the sharps bin for final disposal

True ☐

False ☐

Question 5

Post transfusion observations should be clearly documented on the observation chart after every unit transfused

True ☐

False ☐

Question 6

The end of transfusion time should be recorded on the following documentation: (tick as appropriate)

A ☐ Compatibility label

B ☐ Compatibility report form (A5 pink form from lab)

C ☐ Observation chart

D ☐ Fluid chart

Question 7

The compatibility report form must be affixed to the back of the blood transfusion record and remain in the patient notes

True ☐

False ☐

Question 8

Before final disposal of the blood bag, the compatibility label must be checked to ensure the sticker has been removed for traceability purposes

True ☐

False ☐

Question 9

The Infection Control policy must be adhered to at all times when completing a blood transfusion

True ☐

False ☐

Question 10

All transfusion reactions and incidents which occurred at any part of the transfusion process should be reported and investigated as appropriate as soon as possible

True ☐

False ☐

Section 11: Appropriate use of blood

(Answers can be found in the 'Clinical Indications for Transfusion' handbook)

Question 1

If the reason for anaemia is unknown, blood samples for investigation must be taken prior to transfusion

True ☐ False ☐

Question 2

If a treatable cause for the anaemia is identified, e.g. B12, folate, iron deficiency, haemolytic anaemia, transfusion should be given before treatment

True ☐ False ☐

Question 3

Surgical blood loss may be reduced by discontinuation of aspirin, anticoagulants and surgical technique

True ☐ False ☐

Question 4

Which of the following are recommended transfusion triggers for adults assuming no cardiovascular disease or risk factors unless otherwise stated: (tick as appropriate)

- A ☐ Peri-op blood loss (assuming adequate volume replacement) < 7 g/dl
- B ☐ Critical care < 7 g/dl
- C ☐ Sickle cell anaemia < 10 g/dl
- D ☐ Known or significant risk factors for cardiovascular disease < 8 g/dl

Question 5

Transfusion to a haemoglobin of more than 10 g/dl is very rarely required

True ☐ False ☐

Question 6

The aetiology of a coagulopathy must be known prior to the use of FFP or undertaking invasive procedures

True ☐ False ☐

Question 7

Vitamin K deficiency causing prolonged clotting times should be managed with vitamin K unless oral anticoagulation is planned

True ☐ False ☐

Question 8

Cryoprecipitate is indicated if fibrinogen < 10g/l

True ☐ False ☐

Question 9

During active bleeding or massive blood transfusion, aim to keep platelets > 50 x 10⁹/l

True ☐ False ☐

Question 10

Irradiated blood components are available to avoid transfusion-associated graft-versus-host disease (TA-GVHD) caused by engraftment of viable donor lymphocytes

True ☐ False ☐

Question 11

Which of the following patients require irradiated blood components: (tick as appropriate)

- A** ☐ Patients with Hodgkins disease
- B** ☐ Patients taking purine analogues
- C** ☐ Patients with congenital immunodeficiency
- D** ☐ Patients on alemtuzumab therapy
- E** ☐ Patients with HIV
- F** ☐ Up to three months post renal allograft
- G** ☐ Children under 1 year old
- H** ☐ Newborn baby following intra-uterine transfusion

Question 12

Which of the following patients require cytomegalovirus (CMV) negative blood components: (tick as appropriate)

- A** ☐ Patients with Hodgkins disease
- B** ☐ Patients taking purine analogues
- C** ☐ Patients with congenital immunodeficiency
- D** ☐ Patients on alemtuzumab therapy
- E** ☐ Patients with HIV
- F** ☐ Up to three months post renal allograft
- G** ☐ Children under 1 year old
- H** ☐ Newborn baby following intra-uterine transfusion