Blood Protocol – Components

Contents

Purpose

To ensure a blood component is safe to transfuse

To ensure that the right patient receives the right blood component at the right time at the right rate and the right prescribed dose.

To ensure patients are monitored closely to detect a potential adverse reaction

Definition

Blood Component is the term used for the separated cellular elements

- Re-suspended Red Blood Cells
- Fresh Frozen Plasma
- Cryoprecipitate
- Platelets (pooled, frozen or apheresis)
- Granulocytes

Scope

IV Certificated Registered Nurses / IV Certificated Registered Midwives / IV endorsed Enrolled Nurses

IV Certificated Registered Nurse Practitioners

Anaesthetic Technicians

Medical Officers

Duty Nurse Managers

Clinical Team Coordinators

Clinical Nurse Managers

Registered Anaesthetic Technicians & Trainee Anaesthetic Technicians, Operating Theatre staff

NZBS Staff

Students of Nursing and Midwifery as an observation role only.

Safety Notice

ALL staff has permission to call **STOP** during the transfusion process or at any stage where there are any concerns about patient safety.

A transfusion must only take place in clinical areas that are appropriately resourced with enough trained staff available to monitor and observe the patient for the duration of transfusion

Supporting Material

Controlled Documents

2408295	*Blood Protocol - Pre-Transfusion*
2408294	*Blood Protocol - Adverse Transfusion Reaction*
2405559	*MHP Adult Policy*
232679	*MHP Paediatric Checklist and Flowchart*
2405524	Hand Hygiene Policy
2407578	Infection Prevention and Control
2403034	Peripheral Intravenous Therapy
2401678	Roles and Responsibilities Policy
2400571	Direction and Delegation
2401682	Student Nurse-Midwife Roles and Responsibilities Policy
2401690	*QMR022A CDHB Resuspended Red Cells Transfusion Sheet ("QMR form")*
2403338	*QMR022B CDHB Blood and Blood Product Transfusion Sheet ("QMR form")*
2407367	*Blood Issue & Administration form (replacement for 2401690 / 2403338)*
2410416	*Massive Haemorrhage Issue & Administration form*
2401439	*Caring for patients who decline blood products*
2408817	*Blood Products - Air Retrieval*

Blood Components Issued from a Blood Fridge

2401026 *Blood Fridge Issuing Blood and Products*

Only trained personnel are authorised to issue blood or blood products from a Blood Fridge. Procedural instructions for issue should be located beside a blood fridge.

Procedural Considerations

Two authorised IV certified personnel are required for all blood transfusion procedures.

QMR forms / Blood Issue & Administration form

Original 2407367 Blood Issue & Administration forms should be sent to Blood Bank. This is to avoid duplication of records.

If a request for issue is scanned to *ChristchurchBBeFax@nzblood.co.nz*, the issued blood component will be returned to the requesting area with the scanned form. The scanned form then supersedes the original form. Any transfusion documentation including administration checks or signatures MUST NOT be transcribed onto the original form.

Controlled Storage of Blood Components

Blood components should not be refrigerated after reaching room temperature. Platelets should never be refrigerated

Blood components must only be stored in an NZBS validated blood fridge

Components for research must be stored in NZBS validated and approved fridges and freezers

Vascular access

Ensure the patient has dedicated patent vascular access prior to requesting blood to avoid any delays in transfusion. Transfusion requires a dedicated lumen either as a single cannula, or multi lumen device.

- 18-20g or larger is recommended for adults
- 22-24g for paediatric patients. A smaller gauge cannula may restrict the flow rate and impact on transfusion/infusion times
- Multi lumen access devices such CVAD's are safe for continuous co-administration of other therapeutic solutions if administered through separate lumens. Concurrent medications or infusions via other lumens are permissible as rapid dilution occurs once in the bloodstream.

Administration Sets & Filters

All blood components require the use of a transfusion giving set, or a standard giving set with a blood filter added into the line prior to priming a unit of blood. Fresenius Transfusion Set (TR00) has no ports or vent and includes a built-in blood filter, for use with Fresenius Volumetric Infusion Pumps.

Transfusion administration sets for blood components should

- Contain a **170-200-micron blood filter** to trap cellular aggregates, cellular debris and clots potentially harmful to the patient.
- **NOT have any ports** – ports introduce risk of medications or fluids being co-administered during transfusion of blood cells
- **NOT have a vent** - a vent introduces risk of airborne contamination into the unit of blood cells
- **only be primed with normal saline or blood**

One administration set can be used for 2-4 units of red blood cells within a twelve-hour period provided the flow rate remains adequate. In a massive transfusion situation, 8-10 units may be transfused before the set is changed (if the flow rate remains adequate).

Platelets should be transfused before red blood cells or a new line used. Flush with normal saline before and after platelet transfusion if the same set is to be subsequently use for the transfusion of red cells.

Do not spike any component until you have completed the bedside checks and ready to commence transfusion.

The administration set should be discarded in the yellow biohazard rubbish bin on completion of any blood component transfusion.

Neonates & Infant Transfusion: Blood administered by syringe to a small infant or neonate should be drawn up via a 170-200-micron blood filter.

Blood Warmer

- A blood warmer is required for large volume rapid transfusions (Massive Transfusion), exchange transfusions or when a patient has significant cold reactive antibodies ('cold agglutinins' - Blood Bank will indicate if the use of a fluid warmer is required)
- Only an approved monitored warming system must be used. The warming system must be equipped with visible thermometer and an audible alarm as malfunction can result in red cell haemolysis. Blood components must not be warmed above 41ºC.

Pumps

- Only approved electro-mechanical infusion devices may be used for transfusions.
- Pumps may be used but are not necessary for platelet or fresh frozen plasma transfusions due to the rate that they are transfused.
- DO NOT use for granulocyte transfusions.

Double Independent Bedside Check

All pre-transfusion checks are to be performed at the patient's side

Double independent checking requires two independent checks performed at the patient's side prior to commencing any transfusion. This is to ensure the right patient receives the right transfusion at the right place and right time. Health professionals performing a double independent check are referred to as the "first checker" and "second checker".

- The **"second checker"** completes the administration checks FIRST identifying any problems and correcting them. The "**first checker**" does the final check immediately prior to commencing transfusion and staying with the patient for the first fifteen minutes.
- Students are only able to observe transfusion practice or participate as a "third checker".

Roles

In non-emergency situations one independent checker should be the Health Professional caring for the patient – an IV certified RN or RM, Anaesthetic Technician or Medical Officer. This person is recognised as the **"first checker"** and has overall responsibility for the blood transfusion.

Any other IV certified RN or RM, Anaesthetic Technician, or an IV endorsed Enrolled Nurse, may perform the role as **"second checker".**

IV endorsed Enrolled Nurses are only able to perform the second checker role.

Once the second checker has completed the blood administration checks, the **"first checker"**

- repeats the same bedside checks and determines that it is safe to proceed with the transfusion
- commences the transfusion
- **remains with the patient for the first fifteen minutes** to detect early signs of a reaction
- **completes the first set of observations**, and
- Reassesses the patient before leaving the patient bedside.

Remaining observations and patient monitoring may be delegated to another health professional after the first fifteen minutes of patient monitoring and recorded observations.

Patient Safety Checks

1. Patient Identification

Complete the independent checks **immediately prior to commencing transfusion**.

Ask the patient to state their full name and date of birth. Use open questions to avoid yes/no type answers.

- In community settings the patient must have photo ID as proof of identification.
- In the hospital setting, check that you have the correct patient and that a wristband is being worn. **No Wristband = No Transfusion.**

Confirm the patient's identity against their wristband details (details must be clearly readable) including family and given names in full, NHI number, and date of birth.

Ensure the patient wristband details or photo ID match the patient identifiers on the -

- Completed consent form (signed and dated by the patient/identified welfare guardian or identified NOK). Take note of any expiry date on the consent form.
- Prescription on the National Medication Chart
- Record of Administration sheet (QMR form or 2407367 Blood Product Issue & Administration)
- Blood component swing label

2. Prescription – check for

- the right blood component to be transfused
- special requirements e.g. irradiated, diuretics, pre-medication
- dose/volume of blood component
- rate of infusion

3. Blood component unit label and swing label checks

- Confirm the ABO group and Rh type matches on both labels. Check HCS Blood Bank laboratory results for the patient blood group and compatibility tables
- Confirm the unit number matches on both labels
- Check the expiry date on the blood bag label
- Gently massage the bag contents to check the colour and consistency.

All documentation must match exactly.

Any discrepancies noted during the administration checking process must be reported to Blood Bank immediately before proceeding with the transfusion. Blood Bank will advise on what action to take.

Pre-Medication

Febrile Non-Haemolytic Transfusion Reactions:

Shivering usually occurs 30-60 minutes after the start of the transfusion followed by fever. Treatment with antipyretics for symptomatic rise in temperature may be justified but not advised as routine premedication.

Allergic Reactions:

Can be mild (isolated urticarial or rash) to sever (Anaphylaxis). Treatment with antihistamine or hydrocortisone for generalised allergic reactions is justified. Pre medication may be appropriate before transfusing a patient who has previously experienced repeated allergic reactions. Routine premedication with antihistamines is not advised as it is both unnecessary and may modify important signs of a transfusion reaction.

Administration

Adhere to infection control principles.

Explain the procedure to the patient.

Document the start time on the 2407367 Blood Product Issue & Administration form and prescription chart to ensure that the transfusion will finish within the time prescribed or within **four hours** of blood leaving controlled storage. The start time begins **once the blood reaches the patient's vein.**

Remember –

- a transfusion does not officially begin until donor blood reaches the patient bloodstream
- each blood component is from a different blood donor and has the potential to cause a transfusion reaction.
- to advise the patient on signs and symptoms of a transfusion reaction. Most reactions are mild however it is important to recognise reactions early and seek medical advice.
- To ensure the call bell is within easy reach of a patient, that they are easily visible and can get attention quickly should signs and symptoms of a transfusion reaction develop.

Whole Blood / Red Cells

Paediatrics:

- **Exchange transfusion**: depends on stability of the baby - discuss with NICU consultant.
- **Intrauterine transfusion** - Fetal Medicine speciality.
- **top-up transfusion in a non-bleeding patient** is typically given at 5mL/kg/hr.
- **Resuscitation**: rapid infusion based on the patient haemodynamics.

Adults:

- **top-up transfusion in a non-bleeding patient**: most adults will tolerate one unit every 90 minutes.
- Consider a slower rate in patients with or at risk of congestive cardiac failure.
- **Resuscitation**: rapid infusion based on the patient haemodynamics.

Plasma Components

The use of Fresh Frozen Plasma (FFP), Cryoprecipitate and Platelets in the routine setting should be discussed with Blood Bank prior to prescribing and after a full patient assessment. FFP is a colloid so care should be taken around prescribing a suitable rate of transfusion.

Platelets must be transfused within an hour of issue. All other components must be transfused within four hours of issue from Blood Bank.

Granulocytes

Granulocytes are a special blood component used rarely. They are leucocytes suspended in blood plasma and may contain red cells and platelets.

- Buffy Coat units are 35-65mLs (multiple units will be required per dose). There is no need to change the transfusion set between units.
- Apheresis units are 200-500mL per unit.
- Granulocytes are not leukodepleted so must be **irradiated** to reduce the incidence of graft vs host disease (GvHD) which is almost always fatal

IMPORTANT –

- Granulocytes must be ABO compatible due to the presence of red cells and platelets.
- MUST be transfused with a standard blood filter
- Must NOT be agitated during storage
- Must NOT be administered with a volumetric infusion pump
- Must NOT be transported in the Lamson tube system
- Shelf life is 24 hrs from time of collection.
- Transfuse within 4 hours of issue from Blood Bank; slowly over 2-4 hours
- Monitor patient closely for febrile reactions. These are common and often rate related.
- Ensure administration of Amphotericin B and Granulocytes is separated by several hours to reduce the risk of pulmonary reactions.

Patient Monitoring

All blood component transfusions require observations prior, during and at the end of transfusion. Record all observations on Patientrack or clinical observation chart (where Patientrack is not available)

Observations MUST include

- Temperature
- HR & Blood Pressure
- Respiration rate (in addition to pulse oximetry)
- Continuous cardiorespiratory monitoring for babies under 12 months of age

Baseline observations must be taken within an hour of commencement of transfusion.

Observations for each blood component transfused must be recorded at minimal intervals of -

- 15 minutes after commencing transfusion
- 30 minutes after commencement
- 1 hr after commencement
- Hourly intervals until completion
- Final set of observations once the transfusion is completed

Observations should be monitored more frequently if the patient's condition gives cause for concern.

Follow this monitoring procedure for every consecutive blood component

Documentation

A blood component unit is regarded as transfused even if only a few mLs of blood has passed through the cannula and should be documented in the patient's records accordingly.

Swing Label

The swing label remains attached to the blood component during transfusion to clearly identify the patient details for which the blood was issued. **At the end of transfusion** remove the swing label and attach to the back of the QMR022A or QMR022B form / Blood Product Issue and Administration form.

Units issued from a blood fridge will have an extra section on the swing label – this lower third is used for documentation when issuing blood from the blood fridge and should be attached to Blood Fridge documentation at time of removal from the Blood Fridge

A complete Record of Transfusion includes -

- Completed Consent and Prescription including sample signatures / MCNZ registration number
- Completed QMR form / Blood Product Issue & Administration form with signatures confirming independent bedside checks were performed
- Record start and finish times on either the prescription chart or QMR form / 2407367 Blood Product Issue & Administration form for auditing purposes.
- Swing label adhered to QMR form / 2407367 Blood Product Issue & Administration
- Clinical Progress note including
    - Indication for transfusion
    - expected and actual response
    - signs or symptoms outside normal limits that occurred, and any corrective or clinical actions taken
    - Reference to any Adverse Transfusion Reaction (ATR) - Notification to Blood Bank form (NZBS111F009) if indicated

Safe Transfusion Practice

Contact the Transfusion Nurse Specialist (81620) or Blood Bank (80310) if any concerns

Transport Bag

Blood component units should always be transported in a sealed plastic bag or the NZBS transport bag to protect it from contaminants and poor handling.

The transport bag also provides some privacy for patient details and shows respect for human tissue in public areas.

Use for double bagging for safe disposal of used blood components in the yellow biohazard bag.

The time written on the transport bag represents 30 minutes from when the blood was removed from controlled storage. This indicates the period of time where blood can be safely returned to Blood Bank stock for re-issue.

Return any unused blood components to Blood Bank as soon as possible to avoid wastage.

Only blood issued as blood fridge stock can be placed in a blood fridge. Trained personnel are responsible for placing blood in a blood fridge.

Overnight Transfusions

Routine transfusions should be completed between the hours **0600 - 2200 hours.**

Overnight transfusions should only occur when considered essential by the prescribing physician for clinically urgent cases only.

Ensure adequate resources/staffing to support safe transfusion and patient monitoring.

Time constraints

Blood components should not be exposed to room temperature for any longer than thirty minutes unless being transfused. Blood component transfusion should **commence within 30 minutes** from time of issue or returned to Blood Bank controlled storage conditions within this period.

Note: Controlled storage is any NZBS validated blood fridge, and in accordance with local policy

If more than 30 minutes has lapsed and the blood component is still required by the patient, it can be transfused up to 4 hours from the time of issue, at which time the unit expires.

DO NOT transfuse blood components exposed to room temperature for more than four hours due to the risk of bacterial proliferation.

Note: Issue time is the time when components or products leave controlled storage conditions

- Rate of delivery may need reviewed to complete transfusion within the remaining time available, if commencement of transfusion has been delayed.
- Stop the transfusion/infusion when the component/product expires.

Disposal of used or partially used blood components

If a blood component unit has been spiked but the blood has not passed through the cannula, inform Blood Bank so that the patient's file in the electronic blood management system can be amended to reflect the unit was not transfused. Discard by double-bagging in a yellow biohazard waste bag.

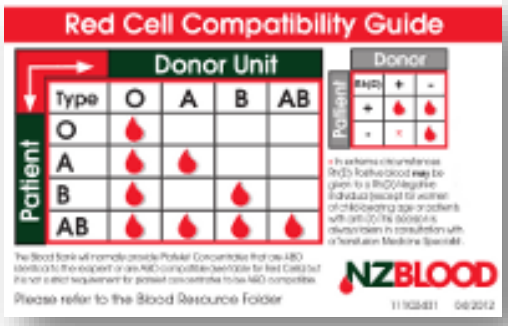
All used/spiked units of blood are disposed of in the yellow bio-hazard waste bag unless -

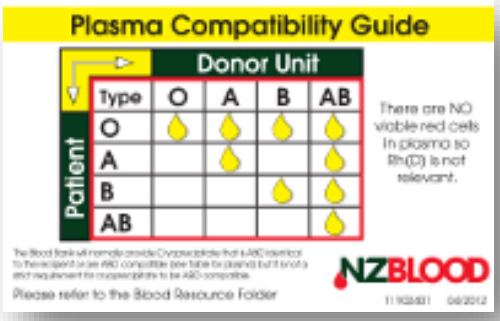
- they are required to be returned to Blood Bank with an Adverse Transfusion Reaction (ATR) Notification to Blood Bank form

- there is a manufacturing fault or damage to the blood bag during transportation. Return to Blood Bank with an Orderly.

Use the transport bag to return the used blood components to Blood Bank via a runner.

Compatibility





Compatible Medications and Intravenous Fluids

Use only 0.9% sodium chloride for injection as a flush pre and post transfusion

It is not necessary to flush the IV line in between multiple units of red blood cells however if a delay is expected a 0.9% sodium chloride 100ml bag can be used to keep the line and cannula patent.

Do not add any medications to any blood component or in the same IV giving set

Opioids may be administered simultaneously using a dedicated PCA pump

DO NOT co-administer 5% Dextrose solution (may induce haemolysis) or Lactated Ringer's (contains calcium ions, which may induce clot formation in the blood bag and/or administration set)

Lamson Tube

The Lamson tube system can be used for requesting and issuing single blood component units. All multiple blood component requests must be collected from Blood Bank by a runner.

The Lamson tube system **must not** be used for special red cell units or Granulocytes.

Do not return damaged units in the Lamson tube and risk contaminating (shutting down) the system.

Verbal Prescriptions

In special circumstances a blood component may be prescribed verbally. Transfusion is a high-risk procedure, so the transfusion must be commenced in the presence of the prescribing Medical Officer. The prescribing Medical Officer must prescribe the transfusion retrospectively within 24 hours.

A prescription is not required for blood components administered intra-operatively or during a massive haemorrhage emergency where the MHP has been activated but should be recorded as given on the Anaesthetic Record by the Anaesthetist, and in the patient clinical notes following an MHP.

Multiple Transfusions – Why give two when one will do?

A patient should be reassessed after each unit of re-suspended red cells to avoid inappropriate or unnecessary transfusion.

Check the patient's haemoglobin and any adverse symptoms before requesting another unit.

Transport/storage of blood components:

Do not open air retrieval or emergency blood transport boxes containing blood components unless transferring blood to a blood fridge (stock replacement) or immediate transfusion is necessary. Breaking the security tab will result in unused units being discarded. Patient documentation will be attached external to the box for flight teams to check blood supplied by Blood Bank.

2408817 *Blood Product - Air Retrieval Policy*

Wastage

To avoid unnecessary wastage in the hospital setting, **any potential delay in transfusion** should result in blood components being returned to controlled storage conditions in Blood Bank **within 30 minutes of issue**.

- Once a delay is resolved, blood components can be re-issued to the patient.
- If a transfusion is cancelled, the unit will be returned to stock.

Units returned **after 30 minutes** exposure to room air will be recorded as not transfused on the patient's electronic blood management system (eTraceline) and then sent to the NZBS destruction centre. These units will not be able to be returned to controlled storage however return to Blood Bank is vital to ensure accurate patient records of transfusion.

Adverse Transfusion Reactions

2408294 *Blood Protocol - Adverse Transfusions Reactions*

Serum Eye Drops (SED)

Serum eye drops are made from blood serum and used for the treatment of ocular surface disease / tear dysfunction disorders. They are dispensed by NZ Blood Service dispensing sites.

Patients may have these initiated as part of their inpatient or outpatient treatment. If they are admitted to hospital they need to continue their SED treatment. Patients should be encouraged to bring their SED with them to hospital where they will be held and issued daily from Christchurch Blood Bank on behalf of the patient.

Serum eye drops require a prescription and consent prior to administration. The vials are stored frozen and thawed one at a time. Once thawed they must be used within 24 hours.

2410013 *Serum Eye Drops*

Emergency Blood Boxes

Purpose

To provide staff with a system of obtaining two units of patient specific red blood cells supplied from the Blood Bank for select obstetric and cardiac surgical procedures

To have blood available on-site for specific surgeries that carry a higher risk of haemorrhage.

The Emergency Blood Box

- can only be requested by Operating Theatres on the Christchurch Hospital Campus.
- differs from the Massive Haemorrhage Pathway which is used in the presence of critical bleeding.
- **For a massive haemorrhage** please call "777" to initiate the Massive Haemorrhage Pathway ("MHP") without delay then ring Blood Bank on 80310

Scope

The process may involve any of the following staff groups:

- Medical Staff
- Anaesthetic Technicians
- Operating Theatre Assistants ("OTA"; runners)
- Orderlies & Hospital Aides (runners)
- New Zealand Blood Services Staff

Eligibility for an Obstetric Emergency Blood Box is restricted to the following surgeries:

A medical decision for the need for an Obstetric emergency blood box must meet the specific surgical criteria listed below.

- Placenta Percreta
- Placenta Accreta
- Placenta Increta

The emergency blood box will contain 2 red blood cell units only, with ballast conditioned to maintained controlled storage conditions for up to 2 hours, if the box remains unopened.

- ONE box will be prepared and issued by Christchurch Hospital Blood Bank ("Blood Bank") for patients who meet the eligibility criteria.
- A second emergency blood box will be ready in Blood Bank to send out immediately. Clinical staff should ring Blood Bank on 80310 to confirm the first box has been opened/used and request second box.
- Two units of red blood cells should be requested on a QMR form / 2407367 Blood Product Issue & Administration form for the first box with a patient addressograph sticker, date and time of surgery clearly identified.

Send a runner or Orderly to collect the box to avoid delays.

Eligibility for a Cardiac High-Risk Blood Box is restricted to the following:

A medical decision for the need for an emergency blood box must meet the specific surgical criteria listed below.

- Type A dissection or equivalent
- Re-do sternotomy
- Coronary Artery Bypass Graft surgery on bypass

The Cardiac Anaesthetists have the ability to order up to 6 FFP, 4 Cryo, 2 Platelets without need for the TMS to be involved i.e. without being questioned by the Blood Bank staff.

Procedure

The need for transfusion should be clearly documented in the patient's clinical records.

Informed Consent is required prior to the use of blood components. Retain the signed consent form in the patient's clinical notes.

Before requesting an emergency blood box, check HCS to establish that the patient has a valid group and screen blood sample. Refer to *Blood Protocol - Pre Transfusion*

Phone Blood Bank on 80310 and request an Emergency Blood Box ideally 24hrs ahead of requirement.

Blood Bank will require the following details -

- Identity and NHI number of the patient requiring the blood
- brief information on the patient's diagnosis and surgery schedule
- Name of the staff member(s) who will act as the Guardian of the Box
- Confirm how the blood should be sent, ie. whether a staff member will collect the blood or if Blood Bank should arrange for an Orderly to have it delivered
- The exact location for the delivery of the box eg. Theatre 41

WRITE "Obstetric *or* Cardiac Emergency Blood Box" on the form and send to Blood Bank via eFax *(ChristchurchBBefax@nzblood.co.nz)* or Lamson pneumatic system.

The Emergency Blood Box will be labelled by the Blood Bank staff with the:

- Patient's full name
- NHI number
- Time the Box was packed
- Time at which ballast conditioning expires. Units must be used within four hours of this time or returned to Blood Bank.
- The name of the nominated Guardian, and
- Theatre Location

Blood Bank staff will enclose a 2407367 Blood Product Issue & Administration form into a clear pocket on the outside of the box to easily identify the patient for whom the blood has been issued and confirming what the box contains and what date and time it was packed.

On receipt of the Emergency Blood Box, the "Guardian" must

- remove the QMR form / 2407367 Blood Product Issue & Administration form and check that the patient ID on the outside of the box matches that on the form and the patient wristband, and
- confirm the presence of a completed patient consent form in the patient clinical notes

Adhere to the *Blood Protocol – Blood Components* for administration of the red blood cells.

Procedural Considerations

The Guardian will be responsible for overseeing the safe keeping, use and return of the Emergency Blood Box to ensure safe transfusion practice. Normally this will be an IV Certified Registered Nurse / IV Certified Nurse Practitioner, Midwife, Anaesthetic Technician, or Medical Officer

Red blood cells cannot be administered from the Emergency Blood Box without completed blood administration checks, performed, and signed for by two independent checkers on the QMR022A respectively.

Do not break the box seal and open the box under any circumstances unless the intention is to transfuse at least one of the units of red blood cells.

The Emergency Box

- contains ballast condition to keep red blood cells within the desired controlled storage range for two hours while the BL8 box is closed and securely sealed.
- Red blood cell units are packed within a clean plastic bag. At no time should a red cell unit come into contact with the ballast. Take care when removing one unit that the second unit remains entirely contained within the plastic bag and the lid is replaced properly.
- Once a sealed box has been opened, the units are exposed to room air and controlled storage conditions have been breached. All blood cell units in the box then default to expire within four hours from the time of opening and should not be transfused after this time.
- Once a unit has been removed, it cannot be returned to the blood box. If unused return to Blood Bank clearly identifying the time the box was opened.
- An Emergency Blood Box that has been opened should be marked 'for disposal', (ticked on the box labelling). Unused units will be recorded as wastage and charged to the department.
- FFP and Cryo issued in transport bags expire at 4hrs from time of issue.
- Platelets should be transfused immediately in a new giving set or prior to red cell transfusion

The Emergency Blood Box must remain in theatre with the patient and returned to Blood Bank as soon as possible once the risk of haemorrhage is controlled, to avoid unnecessary wastage.

It is important to return all unused units so that Blood Bank records can be accurately updated to reflect the actual units transfused to the patient.

Protocol Measurement

Canterbury transfusion guidelines are compliant with both the Australia and NZ Society of Blood Transfusion (ANZSBT) and New Zealand Blood Service (NZBS) recommendations.

NZBS DHB Clinical Oversight Programme (Audit) audits for documented evidence that:

- Blood components have been administered by a nurse or clinician with the appropriate training and certification to do so.
- Prescriptions are present, accurate and correctly completed
- Informed consent has been provided
- Adequate Record of Transfusion is retained in patient clinical notes for traceability that a blood component was used in the clinical setting. This includes the presence of the issued swing label, documented start and finish times and double independent check signatures evidencing patient ID and component have been completed prior to use.
- Policies and procedures related to valid informed consent, prescribing, transfusion administration support safe transfusion practice.

References

ANZSBT. (2019). Guidelines for the Administration of Blood Products

Canadian Society for Transfusion Medicine. Choosing Wisely

NZ Blood Service Resource folder

NZBS 111G122 *Transfusion Medicine Handbook*. A guide to the Clinical Use of Blood Components, Blood Products and Blood Transfusion Procedures in New Zealand. *Note: this resource is now in electronic format only via the NZ Blood Service website.*

NZBS 111i002 Blood Component & Blood Product Administration *(NZBCL121)*

Haematology Red Book

Hospital Health Pathways

Lippincott Procedures