**1.0 PRINCIPLE**

* 1. To provide a safe and effective procedure for trained Blood Bank and Pickup staff to follow in the issue and re-issue of blood and blood components
1. **Purpose**

2.1 To provide a mechanism for proper identification of the patient and the intended product(s) to be transfused

 2.2 To provide documentation of patient-product correlation.

 2.3 To provide documentation of the suitability of a product for transfusion.

2.4 To provide criteria for detection of improper storage of products that are returned to the Blood Bank for possible reissue.

**3.0 Scope**

This procedure directs the issue, return, inspection for issue and re-issue suitability of blood or blood components.

**4.0 Equipment**

4.1 Blood Bank Cooler

4.2 Bio Hazard Bags are used for transportation only

4.3 Lab Information System

**5.0 Quality Control**

5.1 Equipment quality control standards are established and maintained by the procedures specific to the equipment in use. Refer to the specific equipment quality control procedures where applicable.

5.2 Blood and blood component units are inspected for re-issue suitability upon return to the Blood Bank.

**6.0 Procedure: Issuing BlooD and/or Blood Components**

6.1 Pre- Issue: Pickup slip and product selection

6.1.1 Nursing staff is responsible for following Nursing Policy P54.001.7 which address transfusion concerns such as

 6.1.1.1 Patient bracelet/identifications. Products transfusion orders, patient consent, patient monitoring and possible reaction response

6.1.2 Blood and blood products may be picked up by any patient care pickup associate that has undergone Blood Bank defined training. Training is provided by the Blood Bank staff and documentation is maintained by Blood Bank leadership.

6.1.3. The patient care pickup associates are responsible for presenting the completed “**Blood Product Release Form” (Attachment 2)** which initiates the request for blood/blood product. This form must contain the following:

6.1.3.1 Patient’s first and last name

6.1.3.2 Patient unique identification number (MR# or FIN#)

6.1.3.3 Product requested

6.1.3.4 If any of this information is missing the issue process cannot begin.

6.1.4 The patient care pickup associate (pickup staff) hands form to Blood Bank associate (tech).

6.1.4.1 Pickup staff verbally states the name and intended product

6.1.4.2. Tech accepts form, confirming name and product by verbally repeating name and product back to pickup staff.

6.1.5 The Tech verifies component requested and proceeded to proper storage location for said product.

6.1.6. Tech reviews name and MR# of patient from form and searches storage location for appropriate requested product

6.1.6.1 Only Blood Bank personnel are allowed to remove blood and or blood components from storage for distribution.

6.1.6.2 The Blood Bank issues **ONLY ONE PATIENT** at a time

6.1.6.3 The Blood Bank issues **ONLY ONE PACKED CELL** unit at a time

 6.1.6.3.1. **EXCEPTIONS**: OR, ER, DIALYSIS, any threatening emergency that would endanger a patient’s life.

6.1.6.4 Tech selection must consider utilization based upon product selection criteria such as Auto, Directed, expiration date, volume, Irradiation, antigen typing, washing, HLA matched etc.

6.1.6.5 Blood Bank Tech ensures that there is a Patient Identification Label on the rear of the unit and double checks Name, MRN and Unit number to match the Transfusion Record Tag and Request form

 6.1.6.6 After tech has selected appropriate patient and product, pickup staff and tech together shall review unit labeling, patient documents and lab information system information

6.2 Issue/Review of product and patient documentation on paper and in LIS

6.2.1. An interactive verbal dialogue and review of all product and patient documentation occurs between the Blood Bank Tech and the Pickup associate comparing the Patient’s Name and MRN (or other unique identifier) on various media

6.2.1.1 Blood Product Release Form (aka pickup or yellow sheet)

6.2.1.2. Transfusion Record Tag (Attachment 1) (‘TAG’)

6.2.1.3. Product label

6.2.1.4. LIS system (Issuing app)

6.2.2. The Pickup person must actively and verbally participate in this review but the onus of responsibility lies with the Blood Bank Tech.

6.2.3. The pickup person reads aloud the following information from the Transfusion Record Tag and Release form information.

Patient’s Name

Patient’s MR# or FIN #

Patient’s ABO/Rh

Unit ABO/Rh

Donor identification number (Unit number)

Unit expiration date/time

Crossmatch result status

6.2.4. The Blood Bank Tech simultaneously checks the following information from the blood product unit, all other labeling, the LIS and Release Form for correctness.

Patient’s Name

Patient’s MR# or FIN #

Patient’s ABO/Rh

Unit ABO/Rh

Donor identification number (Unit number)

Unit expiration date/time

Crossmatch result status

 6.2.5 Additionally the Tech must review the product and the LIS to assure all patient antibody, comments and special instructions are met and unit is labeled accurately.

 5.2.5.1. Confirm patient identification label and tag are secure again at this time

6.2.6 The Blood Bank technician examines the component bag to ensure there are

 no leaks, breaks, discoloration, or evidence of contamination.

6.2.6.1. Blood components are not issued if the integrity of the unit has been compromised. Quarantine the unit. Advise the Supervisor/Lead Technologist of the situation.

**Note: Any discrepancies must be resolved before releasing the component from the Blood Bank.**

6.2.7. Dispense the component in the **LIS** system as directed by the specific **LIS** procedure

6.2.8. Blood Bank Technician completes the **Dispense Record** section on the **Blood Bank Transfusion Record** **Tag** **(Attachment 1)**:

6.2.8.1 Tech code

6.2.8.2 Date/time of issue

6.2.8.3 Patient location

6.2.8.4 The pickup person signs the “Dispensed To” block on the Transfusion Record.

6.2.9. Blood Bank Tech places unit (one PRBC unit, up to two FFP units, one SDP) in the plastic Bio Hazard bags for transport

NOTE: This is for routine transfusion only, not for EP, or Pheresis transfusion

6.2.10. Complete all documentation on the **Blood Product Release Form (Atachment2)**

 6.2.10.1. Released to “pickup staff” and BY: Blood Bank Staff

 6.2.10.2 Record unit number that was issued

 6.2.10.3. Place completed form in appropriate basket

6.3. Issuing During an Exsanguination Protocol:

 6.3.1 A technician-to-technician method is used where one technician reads aloud the Transfusion Tag information as outlined above for the packing of the cooler:

6.3.1.1 In the event a second technician cannot be utilized, the runner (ie. Pick up person) performs the check.

 6.3.2 The runner (pick up person) reads aloud the Transfusion Tag information as outlined above for the single donor platelet. The runner also reads aloud the patient information written on the **Cooler Tracking Form (Attachment 3)**

6.4 Return Blood and/or Blood Component:\* **NOTE: BLOOD IS TO BE RETURNED BACK INTO CERNER IMMEDIATELY. DO NOT PUT IN REFRIGERATOR FOR LATER.**

6.4.1 Document the date, time, and temperature of component return in **LIS**:

6.4.1.1 Document the return reason in the **LIS** system as directed by the specific **LIS** procedure.

6.4.2 Inspect the unit to ensure that the bag has not been entered and is intact (no leaks or breaks).

6.4.2.1 Units are eligible for reissue provided the unit has not been entered, broken, or contaminated and the unit was returned in temperature as defined below and within 30 minutes from issue.

6.4.3 Red cell or FFP units that have been maintained continuously at 1-6°C in the Operating Room refrigerator monitored by the Blood Bank are eligible for reissue.

6.4.4 Red cell or FFP units that have been stored in validated iced coolers are eligible for reissue. (See BB01-021- Cooler Policy)

 **EMCP:**

6.4.5 Red Blood Cells, FFP, Thawed Plasma, Platelets and Cryo issued must have their temperature confirmed in order to be eligible for reissue.

 6.4.5.1 Red Cells, FFP and Thawed Plasma 1-10C

 6.4.5.2 Platelets and Cryo 20-24C

 6.4.5.3 Place blood component product on the Temp Check plate located at the issue bench.

 6.4.5.4 Place product **directly** on the plate making sure that the transfusion tag and or stickers are not between the unit itself and the temperature plate. **(Note: temperature may read higher if there is material between the product bag and the temperature plate.)**

6.4.5.5  **Remove** all transfusion tags and stickers before placing blood products back into available inventory.

**EMC-EP:**

6.4.6 Red Blood Cells, FFP, Thawed Plasma, Platelets and Cryo issued must have their temperature confirmed in order to be eligible for reissue.

 6.4.6.1 Fold the product around the thermometer located in the Blood Bank area, making sure that the transfusion tag and or stickers are not between the unit and the thermometer. **(Note: temperature may read higher if there is material between the product bag and the temperature plate.)**

 **6.4.6.2 Remove** all transfusion tags and stickers before placing blood products back into available inventory.

6.4.7 Products that do not comply with restrictions to both temperature and time constraints cannot be reissued. Dispose of these products in the biohazard receptacles.

6.4.8 Update status in LIS and **record temp** in selected area for units passing temp and visual inspection. For units failing, select reason “**Temp Unaccept-Discarded**”

 5.3.7.1 Document on the **Blood Bank Transfusion Record** **Tag(attachment1)** the component is not suitable for reissue

 6.4.9 Notify the Supervisor/Lead Technologist of any returned component determined to be unsuitable for reissue.

 6.4.10 Initiate a **BB08-002 Form A: Product Wastage Report Form** for all units stored inappropriately or returned beyond the acceptable temperature and time.

6.4.11 Platelets and Cryoprecipitate shall be inspected and may be returned if transfusion has not been initiated within Nursing guidelines as long as the container was not compromised

6.5 Reissue component:

6.5.1 Blood components are reissued as directed in section 6.1 of this procedure only if the following conditions have been observed:

6.5.1.1 The container closure has not been disturbed.

6.5.1.2 All components have been maintained at the appropriate temperature.

6.5.1.3 At least one sealed segment of integral donor tubing has remained attached to the container.

5.5.1.3.1 Removed segments are detached only after confirming that the tubing identification numbers on both the removed segment (s) and the container are identical.

6.5.1.4 The records indicate that the blood or component has been inspected and that it is acceptable for reissue.

**7.0 Procedure Notes**

7.1 Before a unit leaves the Blood bank, it is identified and the intended recipient is verified. Each unit is examined immediately prior to issue for suitability.

7.3 Temperature given by the tech check plate may take time to adjust to the correct temp.

 7.4 Products returned to the Blood Bank for possible re-issue are maintained at the temperature appropriate for the product.

 7.5 Red blood cells and plasma returned after 30mins but within the required temperature are to be quarantined for Supervisor approval. Email the supervisor a notification along with the temperature that was entered in the computer for the product.

 7.6 Platelets that are returned within 6hrs and within required temperature should be returned and made available.

7.7 Units issued in validated coolers are acceptable for return up to 6 hours. (See SOP BB01-021)

 7.8 Cryoprecipitate that is returned within 4 hrs and has a temperature of 20-24C shall be returned

 into available inventory. Cryoprecipitate returned after 4hrs shall be discarded and documented as wastage.

 7.9 Units issued in validated coolers are acceptable for return up to 6 hours (See BB01-021)

**8.0 References**

8.1 Roback, John D., Ed Technical Manual, 18th ed. Bethesda, MD American Association of Blood Banks, 2014

8.2 Standards for Blood Banks and Transfusion Services, 30th ed. Bethesda, MD: American Association of Blood Banks, 2016

**9.0 Records**

9.1 Records of the product inspection and issue include the identity of the person issuing the product and the identity of the person, to whom the product is issued, and the date and time of issue.

9.2 Final component disposition records are retained indefinitely.

9.3 Blood Bank maintains the documentation for training of pickup staff.

**10.0 Attachments/Appendix/Forms/Documents**

10.1 Attachment 1: **Blood Bank Transfusion Record Tag**

10.2 Attachment 2: **Blood Product Release Form**

10.3 Attachment 3: **Blood** **Bank Cooler Tracking Form**

10.4 **BB08-002 Form A**: **Product Wastage Report Form**

**Approval Signatures:**

|  |  |  |
| --- | --- | --- |
| **Date** | **Printed Name** | **Signature** |
| 8/8/16 | Pettina WaltonBlood Bank Supervisor |  |
| 8/8/16 | Vanessa RawlingsLaboratory Supervisor, Elkins Park |  |
| 8/8/16 | Manjula Balasubramanian, MDSection Director, Blood Bank |  |
| 8/8/16 | Nancy A. Young, MD, FCAPMedical Director  |  |

**History Review**

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| **Date Reviewed** | **Reviewed By** | **Revisions** |
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**Attachment 1: Blood Bank Transfusion Record** **Tag**

**Attachment 2: Blood Product Release Form**

**ALBERT EINSTEIN HEALTHCARE NETWORK**

**BLOOD BANK** **PHILA., PA 19141** **BLOOD PRODUCT RELEASE FORM**

Attach Patient Identification Label or Print (Name, Hospital Number, Location)

 Date Please release the following for administration to indicated patient:

 # Units:

 \_\_\_\_\_\_ Red Blood Cells (RBCs)

 \_\_\_\_\_ Plasma, Fresh Frozen (FFP)

 \_\_\_\_\_\_ Platelets (pooled or SDP)

 \_\_\_\_\_\_ Cryoprecipitate [g]

This Form Completed by \_\_\_\_\_\_ RhIg (RhoGam)

Released to: \_\_\_\_\_\_ Autologous Blood

By: \_\_\_\_\_\_ Other:

 Blood Bank Tech

 **Attachment 3: Blood Bank Cooler Tracking Form**

**Attachment 4: Product Wastage Report**