

Discontinuation Date:

I. PURPOSE:

To Procure Blood and Blood Products from the Blood Bank for transfusion.

II. POLICY:

Requests for blood and blood products are processed by the Blood Bank providing that the **Request for Blood Components, BB-5—5 (Exhibit #1)** card is signed and completed and the order is placed into the Laboratory Information System.

III. DEFINITION(s):

Laboratory Information System (Cerner).

IV. RESPONSIBILITIES (Includes all departments/services involved in development/implementation and/or monitoring):

Pathology, Emergency Department, Ambulatory Oncology, Pediatric Hematology/Oncology, Dialysis, Medicine, Surgery, Pediatrics, Dentistry.

V. PROCEDURES/GUIDELINES

BLOOD BANK SPECIMENS

For all Blood Bank specimens, accurate labeling of all tubes must occur **at the patient's side**. The labeling will include the patient's name, a second identifier, (usually the medical record number) and the date of the collection. **The phlebotomist must initial or sign all Blood Bank specimens.**

***Blood Bank specimens:** Except for emergency situations, for patients for whom any blood product has been ordered and for whom the Blood Bank does not have a previous ABO/Rh record, ABO/Rh typing must be performed on two (2) different specimens collected at different times, prior to release of any blood product. For specimens for typing, screening and crossmatching, the Clinical Laboratory/Blood Bank is required to immediately notify any discovered ABO type discrepancy to the Chief of Service, to the Director of Patient Safety, and any other personnel deemed appropriate. Their immediate intervention will include the identification of the phlebotomist who has contributed to the discrepancy and the subsequent plan of corrective action.*

For patients for whom any blood product has been ordered and for whom the Blood Bank does not have a previous ABO/Rh record:

- a. ***Two different specimens must be collected at different times, during the current or a previous visit. If drawn during the same visit, they should be drawn at least 10 minutes apart. The specimens may be drawn by the same or by different phlebotomists. The second specimen will be requested by the Blood Bank.***

Phlebotomist(s) will be held individually responsible for proper timing of the specimen collection, patient identification and specimen labeling.

- b. ***An order for the second specimen should be placed in the laboratory information system as **BB Requested ABO** by an authorized health care provider.***

- c. *Until the second specimen set is collected and tested by the Blood Bank, blood products will be available only upon presentation of an Emergency Release form [the second side (back side) of the orange requisition, Request For Blood Components, # BB-50-5] signed by an attending physician. In such a situation, blood product issue will be based upon testing and/or crossmatch of the first available specimen set. The second specimen set must be provided as soon as possible.*

Non-Preadmission Testing (PAT) specimens are viable for three days. See V. Preadmission Testing Specimens (PAT) for information pertaining to them.

PRE-ADMISSION TESTING SPECIMENS (PAT)

Specimens drawn as PAT are acceptable for Blood Bank testing for fourteen (14) days, provided the patient signs the attestation statement which declares that the patient has not been transfused or is/was pregnant in the previous three months. **(Exhibit #3)** This declaration is witnessed by the PAT staff member drawing the specimen.

If the patient has been transfused or is/was pregnant in the last three months, the specimen defaults to the standard three days,

PAT and the Two Specimen Policy

- a. If there is a previous ABO/Rh record in the Blood Bank, the PAT specimen will be valid for fourteen days.
- b. *If there is no previous ABO/Rh record in the Blood Bank, and if there is a need for blood products, the blood products will be tested against the PAT specimen **but will not be released unless a second specimen is tested by the Blood Bank or a signed Emergency Release form (the second side, i.e., the back side) of the orange requisition, Request for Blood Component #BB-50-5] is presented.***

A. The Ordering of Plasma, Platelets, Cryoprecipitated AHG

At Downstate Medical Center, the following categories of health care providers can order blood products:

Resident Physicians and the following categories of licensed (by New York State) professionals:

Physicians

Dentists

Podiatrists

Nurse Practitioners – if their departmental privileges and hospital/departmental practice agreement permit this.

Physician Assistants – if their departmental privileges and hospital/departmental practice agreement permit this.

1. All non-operative requests for non-red cell components are reviewed and approved by the Blood Bank Clinical Pathology resident. The Blood Bank will provide the pager number of the resident on call.
 - Given an appropriate indication, a product order for fresh frozen plasma (FFP), plasma (24hr. Plasma), single donor platelets (SDP), and cryoprecipitated AHG (Cryo), must be placed in the Laboratory Information System in the usual manner.
 - Orders for multiple products can be placed under the same accession number by adding each separate product order to the “scratchpad” and submitting the whole order at one time.

- This will generate a series of bar-coded labels, the largest of which is to be placed on the standard orange requisition, **REQUEST FOR BLOOD COMPONENTS**, #BB-50-5 (Exhibit #1).
- The ordering health care provider is to sign in the “Requested by” space on the left side of the requisition.
- The **REQUEST FOR BLOOD COMPONENTS** card is then delivered to the Blood Bank for processing.

Products will not be processed without an appropriate laboratory computer order and correctly filled in, bar-coded orange requisition.

- When the order is completed, the white pickup card, **REQUEST FOR BLOOD RELEASE** card (**Exhibit #2**), must be presented for the dispensing of the products. Anyone affiliated with the institution can pick up products.
- Only one product for a single patient is dispensed at a time. In an emergency, two products for the same patient may be dispensed.

B. The Ordering of Red Blood Cells

2. Orders for red blood cells can be either “Type and Screen” or “Type and Cross.” They must be placed in the Laboratory Information System in the usual manner.

Type and Screen

- For “Type and Screen,” a series of bar-coded labels will be generated. The largest label is to be placed on the right side of the orange requisition, **REQUEST FOR BLOOD COMPONENTS** card.
- The ordering health care provider is to sign in the “Requested by” space on the left side of the orange requisition.
- The specimen is to be drawn, labeled with the remaining large bar-coded labels, and the labels signed by the phlebotomist of that specimen at the patient’s bedside.
- The phlebotomist of the specimen must also sign in the “Signed by” space on the left side of the orange requisition, attesting that the proper patient identification checks were performed.

Non-Preadmission Testing (PAT) specimens are viable for three days. See V. Preadmission Testing Specimens (PAT) for information pertaining to them. If a “type and screen” patient needs red cells within those three days, an order for red blood cells must be placed in the Laboratory Information System.

- A bar-coded label is placed on an orange requisition. The ordering health care provider’s name is written in the “Requested by” space.
- The order is then delivered to the Blood Bank. Unless the specimen is QNS, no additional specimen needs to be sent at that time.

Type and Cross

- For “Type and Cross” requests, the type and cross and red cell order can be placed under the same accession number by adding each order to the “scratchpad” and submitting the whole order at one time.
- A series of bar-coded labels will be generated.
- The largest label is to be placed on the right side of the orange requisition, **REQUEST FOR BLOOD COMPONENTS** card.
- The ordering health care provider is to sign in the “Requested by” space on the left side of the orange requisition.

- The specimen is to be drawn as per the hospital policy on venipuncture (VEN-2), labeled with the remaining large bar-coded labels, and the labels signed by the phlebotomist of that specimen at the patient's side.
- The phlebotomist of the specimen must also sign in the "Signed by" space on the left side of the orange requisition, attesting that the proper patient identification checks were performed.

When the order is completed, the white pickup card, **REQUEST FOR BLOOD RELEASE** card, must be presented for the dispensing of the products. Anyone affiliated with the institution can pick up products.

Only one product for a single patient is dispensed at a time. In an emergency, two products for the same patient may be dispensed.

ANY deviation from this protocol will result in the discard of the specimen, orange requisition and the cancellation of the associated tests and products.

Note: For the morning pick up of red blood cells from the Operating Rooms, a slightly different protocol is used, i.e., as will be described under the heading, Operating Room (O.R.)

C. The Ordering of Rhogam (Rhlg)

1. Rhogam is usually ordered for prenatal, post-partum females or in any situation an Rh negative pregnant female may have experienced a fetal maternal hemorrhage.
 - An order for a "Rhogam Workup" along with an order for a Rhogam vial is placed in the Laboratory Information System under the same accession number by adding each order to the "scratchpad" and submitting the whole order at one time.
 - A series of bar-coded labels will be generated.
 - The largest label is to be placed on the right side of the orange requisition, **REQUEST FOR BLOOD COMPONENTS** card.
 - The ordering health care provider is to sign in the "Requested by" space on the left side of the orange requisition.
 - The specimen is to be drawn as per the hospital policy on venipuncture (VEN-2), labeled with the remaining large bar-coded labels, and the labels signed by the phlebotomist of that specimen at the patient's bedside.
 - The phlebotomist of the specimen must also sign in the "Signed by" space on the left side of the orange requisition, attesting that the proper patient identification checks were performed.

When the order is completed, the white pickup card, **REQUEST FOR BLOOD RELEASE** card, must be presented for the dispensing of the products. Anyone affiliated with the institution can pick up products.

Only one product for a single patient is dispensed at a time.

ANY deviation from this protocol will result in the discard of the specimen, orange requisition and the cancellation of the associated tests and products.

D. The Ordering of Derivatives

1. All derivative orders must be approved by the Hematology Service except for Novoseven, which can only be approved by the Blood Bank Director or designate.
 - The type of derivative must be chosen from a drop-down menu.
 - The number of units (dosage) must be filled in.
 - A series of bar-coded labels will be generated.
 - The largest label is to be placed on the right side of the orange requisition, **REQUEST FOR BLOOD COMPONENTS** card.
 - The ordering health care provider is to sign in the "Requested by" space on the left side of the orange requisition.

When the order is completed, the white pickup card, **REQUEST FOR BLOOD RELEASE** card, must be presented for the dispensing of the products. Anyone affiliated with the institution can pick up products.

ANY deviation from this protocol will result in the discard of the specimen, orange requisition and the cancellation of the associated tests and products.

The product will arrive on the nursing station with an attached two-copy **TRANSFUSION TAG (Exhibit #4)**.

1. This form is then to be filled in and signed by the two individuals who perform the itemized pretransfusion checks and start the transfusion.
2. In case of transfusion reaction, the person stopping the transfusion and documenting signs/symptoms will sign the form. The form will be returned to the Blood Bank with appropriate specimens, the blood bag, IV tubing and solutions. The infusion needle or catheter should not be sent to Blood Bank; it should be detached and discarded in a sharps disposal container. An order for a "Transfusion Reaction Workup" must be placed into the Laboratory Information System.
3. The form is completed at the end of the transfusion. The person terminating the transfusion must sign this form. The top, white copy of the form is attached to the patient's chart on the blood bank sheet (an orange form) by the person terminating the transfusion, or his/her designate.
4. A completely filled in **TRANSFUSION TAG** (bottom, yellow copy) is to be returned to the Blood Bank as soon as possible.

For a detailed discussion of the actual transfusion procedure, consult and follow the **HOW TO ADMINISTER A BLOOD TRANSFUSION** procedure in the BLB2-A, Hospital Policy and Procedure Manual.

E. Emergency Requests or Stat Requests for Blood (Including the Emergency Department Services)

Stat and emergency requests should be so labeled and the Blood Bank staff should be notified by telephone or in person of the urgent request.

- a. This request requires the Blood Bank to immediately proceed to type and screen the patient sample, if not already done, and find compatible blood by performing an immediate spin cross-match.
- b. Blood will be available within 45 minutes unless a serologic problem is encountered; if such is encountered, blood availability will be delayed.

- c. In cases when the need for blood is more urgent than a “stat” request, the physician should so inform the Blood Bank.
- d. A cross-match will not be performed. One of the following may be done:
- e. An Attending physician must sign a release, (back of the **REQUEST FOR BLOOD COMPONENTS**, BB-50-5, requisition) indicating the emergent situation which requires the release of uncross-matched blood.
- f. The Blood Bank will cross-match the units after the release of the blood and notify the physician of any abnormal results.

There are three options for the emergency release of uncross-matched/incompletely cross-matched red blood cells for transfusion.

1. Option A: (Group/Type Immediate Spin Cross-match)–The patient is typed; ABO & Rh identical blood will be released on an immediate spin cross-match, but the antibody screen will be incomplete; blood will be available within five to ten minutes.
2. Option B: (Group/Type Specific; Uncross-matched)–The patient is typed; and ABO & Rh identical blood will be released without cross-matching; blood will be available within five to ten minutes. However, this is the least desirable.
3. Option C: (Uncross-matched Group O negative) O negative red blood cells will be released; blood will be available within five minutes.

The Blood Bank will complete the testing of the patient’s specimen and cross-match the units as quickly as possible after the release of the blood. The physician will be notified of any abnormal results.

An uncross-matched or partially cross-matched, and/or testing incomplete label is placed on the unit.

F. Blood On-Call

- The Blood Bank is responsible for the conditions under which blood must be kept. Therefore, blood cannot be held on the floors for extended periods, i.e., in food or medication refrigerators.
- If the blood is not used, it must be returned within **30 minutes** of issue from the Blood Bank. With the exception of patients in the O.R. where there is a Blood Bank monitored refrigerator, only one unit at a time will be released to the nursing stations from the Blood Bank for a patient.
- In an extreme emergency requiring two or more units transfused to the same patient, a personal, verbal, or written order by the physician is required. Blood can be held cross-matched for up to 3 days.

G. Operating Room (O.R.)

- Blood samples for cross-matching, while often submitted the day prior to surgery, must be submitted within 3 days of the elective transfusion, for in patients.
- These samples are routinely processed. At approximately 6:00 A.M., the O.R. messenger will pick up the blood cross-matched for each patient and deliver these units to the O.R.
- If additional units are needed, the nurse or surgeon should call the Blood Bank via the hospital telephone.
- At the time of the request, the number of units required must be indicated. At approximately 4:00 P.M., the O.R. messenger returns all the unused blood from completed surgical procedures, to the Blood Bank.

Emergency Department (ED)

Blood samples for cross-matching will be treated as emergencies, unless otherwise stated.

VII. ATTACHMENTS:

None

VIII. REFERENCES

Refer to BLB-2, BLB-2A

CAP Transfusion Medicine Checklist, 7/11/11

American Association of Blood Bank Standards 27th edition, 2011

American Association of Blood Bank Technical Manual 17th edition, 2011

NYS Department of Health Regulations, Subpart 58-2, 9/07

NYS Department of Health Standards, January 2008

Letter from Dr. Jeanne V. Linden, Director of New York State Blood and Tissue Resources.
1/6/09.

SUNY Downstate Medical Executive Committee, 5/2011