

Blood Banking (Transfusion Medicine)—Blood Transfusion Policies and Standard Practices

Logan Health Medical Center Laboratory maintains a transfusion service providing blood and blood components for routine and emergency situations. A pathologist is available for consultation at all times.

Pre-transfusion Testing

Prior to the issuance of blood, the patient's ABO group, Rh type, and an antibody screen must be determined and a crossmatch must be performed. Prior to the issuance of Plasma components, only the ABO group and Rh type need to be determined. All patients have their ABO/Rh confirmed prior to transfusion of blood components.

There are 3 types of requests for pre-transfusion testing:

1. CLOT - "Blood Bank Specimen to Hold" is ordered when blood components are not anticipated but may become necessary. The specimen is drawn and labeled for potential transfusion; however, no testing is performed. Should blood components be required, allow a minimum of 1 hour for availability.
 - Do Not Order CLOT if patient is going to surgery or pre-admit for surgery. Order a TS instead.
2. TS - "Type and Screen" consists of an ABO group, Rh type, and antibody screen. Order when the need for transfusion of blood components is anticipated. Allow a minimum of 1 hour for availability. If the patient has a clinically significant antibody, 2 units of blood will be made available for that patient. This will require additional testing time.
3. RCLR - "RBC" also known as a "Type and Crossmatch" consists of ABO group, Rh type, antibody screen, and crossmatch. This is ordered when crossmatched components are indicated. All blood components containing Red Blood Cells (RBCs) must be crossmatched. Allow a minimum of 1 hour for testing and blood component availability.
Note: Whenever a blood component is required, order the specific blood component (i.e., RCLR, FFP, PLT, or CRYO) in the Meditech computer. Any additional testing required for that blood component (crossmatch, etc.) will automatically be added to the order.

A positive antibody screen will automatically initiate antibody identification (with additional charges) to determine the specificity of the antibody.

Pre-transfusion testing for neonates (younger than 4 months of age) requires an initial determination of ABO group, Rh type, and antibody screen. The antibody screen may be performed on a specimen drawn from the infant (preferred specimen) or from the mother (acceptable alternative). If the antibody screen is negative, group O Rh Negative RBCs may be transfused without crossmatching for the remainder of the neonate's admission. If the antibody screen is positive, the antibody is identified and group O Rh Negative, Antigen Negative blood will be crossmatched for transfusion.

Request for Transfusion

Written or electronic orders from the physician are required to transfuse blood components. Nursing staff may initiate orders on a verbal or standing order with the physician's direction. Documentation of the verbal order must be on the patient's chart and in their Electronic Medical Record.

Patient Identification

The person collecting the blood specimen must positively identify the patient at the time of specimen collection. The identification of the patient **MUST** be verified. For Outpatients or Pre-Admission Patients, a Transfusion Medicine Identification forms must be completed. It is available from LHMC Printing Services (form 8762-014), or from the LHMC Laboratory.

1. Ask the patient to state and spell their full name and date of birth. If the patient cannot identify themselves, find someone who can positively identify the patient for you.
2. In the hospital setting, check that the patient is wearing a patient identification band. Do not draw the specimen until the patient is properly banded by staff.
3. Outpatients or Pre-Admission patients will be asked for their Transfusion History and form 8762-014, Outpatient/Pre-Admission Transfusion Medicine Identification, completed. If they answer "No" to the 4 questions, their blood bank specimen can be collected up to 14 days prior to their treatment and/or admission.

DO NOT COLLECT A SPECIMEN IF THERE ARE ANY DISCREPANCIES. DO NOT RELY ON CHARTS OR RECORDS ON THE BED, WALL, OR NEARBY EQUIPMENT AS A SOURCE OF PATIENT IDENTIFICATION.

Specimen Collection

Pre-transfusion testing (CLOT "Blood Bank Specimen to Hold"; TS "Type and Screen"; and RCLR "Type and Crossmatch") requires one 6-mL to 7-mL pink or 4 mL lavender-top (EDTA) tube. Before leaving the bedside, the collector must label the blood

specimen tube(s) with the following information:

Required Information on Pre-Transfusion Specimens and accompanying Outpatient/Pre-Admission Transfusion Medicine Identification form if used;

- The patient's full first and last name (no nicknames)
- Patient's Date of Birth
- The emergency identification number if patient's name is unknown (Account Number or Medical Record Number)
- Date and time of collection
- Collector's mnemonics (or full name if collector is not LHMC staff member)
- The patient's Account Number is required for Emergency situations (full traumas or patients with unknown identity), otherwise, the patient's hospital admission account number or medical record number is optional.
- Verifier mnemonics (not required if using a Mobilab)

Handwritten labels or imprinted labels may be used. Information on the label must be identical to that on the hospital identification band, physician order sheet, and laboratory test requisition. The above information should be printed or written legibly on the patient's specimen label at the patient's bedside, at the time of specimen collection. The information required for identifying the patient should be obtained by asking the patient to spell their first and last name and state their date of birth, and comparing this information with what is on the patient's hospital identification bracelet (see "Patient Identification"). Any discrepancies should be resolved before the specimen is collected. After the specimen is collected, the label containing the above listed information should be placed on the specimen tube. The specimen, and the paperwork for Outpatient/Pre-Admissions, should be transported to the Blood Bank as soon as possible.

The specimen expires 3 days (72 hours) from the initial Red Blood Cell Transfusion.

Blood Supplier

Logan Health's Blood supplier is Vitalant. Most components are processed and supplied by Vitalant in Spokane, Washington.

Special Blood Components

Special blood components (irradiated blood, washed red blood cells, HEA matched blood, HLA matched platelets, crossmatched platelets) are specially ordered from LHMC Blood Supplier, Vitalant, and usually comes from Spokane, WA. Depending on the component, it may take up to 4 days to receive. Special handling or additional testing fees will be an additional charge to the patient.