

Referenced in L.02.041 Compatibility Testing, L.02.042 Distribution of Crossmatched and Uncrossmatched Units, L.02.025 Investigation of Suspected Transfusion Reactions

### General Information

- All testing is performed at the Blood Center by CLIA qualified personnel
- **Normal Laboratory Hours: Mon-Fri. 7:00am -7:00pm.** Testing services are available outside of these hours; however additional fees will apply (STAT, after-hours, etc.).

<u>Laboratory</u>	<u>Hospital Services</u>
(512) 206-1226 (phone)	(512) 206-1229 (phone)
(512) 206-1363 (fax)	(512) 458-1514 (fax)

### Sample Collection

- It is the responsibility of the transfusing facility to collect and properly label blood samples for testing. Packets are provided to your facility that each include sample tubes, a Typenex wristband, a request form and this information sheet.
- Samples for transfusion testing on pre-operative patients can be collected at the Blood Center on at the main location at **4300 North Lamar Blvd.** To arrange for this service, call the Laboratory. (If the patient presents at BTC without prior notice, it may cause undue delay in the patient having their blood collected.)
- Collect samples within 24 hours of anticipated transfusion. Samples should be transported to the Blood Center as soon as possible after collection. **For STAT orders, please call the BTC laboratory to ensure timely processing.** The most common methods of transport are:
  - Samples are delivered by your courier, or
  - The Blood Center can pick them up. Call the Hospital Services department to make arrangements for sample pickup. Additional charges will apply.
- Samples and the request (**F.0495 Transfusion Medicine Request**) must be in agreement, and samples must be labeled at bedside concurrent with placing the wristband on the patient. The following information is required:

***Note: Samples and requests are reviewed upon receipt at the Blood Center. If samples are mislabeled they must be discarded, and you will be requested to re-collect samples. Proper specimen collection is of utmost importance to patient safety!***

- ***Patient's full name***
- ***Social security number*** (use of the SS# for the primary identification is strongly encouraged for optimal identification, however if a social security number is not available for a patient, another unique identifying number may be used i.e. MR#, DOB)
- ***Typenex number*** (blood bank wristband)
- ***Collection date and time***
- ***Phlebotomist's initials***

- Using the Typenex wristband
  - Verify the patient's identity
  - Using a ballpoint pen, fill in the required identifiers as stated above on the ID label portion of the band, ensuring the information is legible
  - Peel the completed ID label from the band
  - Affix the label lengthwise along the patient's sample tube
  - A carbon copy of the ID label will remain on the band and darken over time
  - Label a second tube using one of the extra coded stickers from the band. Legibly handwrite the remaining required information on the sample tube so that it is identical to the wristband and the other sample tube.
  - Wrap the band once around the patient's extremity
  - Center the band between the clip posts and snap firmly
  - Once closed, the clip will cut the band
  - Detach the "tail" by holding the clip firmly and tearing down and away from the patient with a twisting motion
  - Using the labeled sample tubes, draw the blood
  - Ensure all information on the samples, wristband and the request form are identical
  - The "tail" may be kept and used at your facility, or sent to the Blood Center with the samples/request
- Specimens are routinely used for transfusion testing for 3 days, but can be extended to 7 days if the patient has not been pregnant or transfused in the last 3 months. Record the 7-day specimen request in the comments section of the request form.
- Complete **F.0495 Transfusion Medicine Request Form** with all patient demographic and clinical information prompted.
- Red Blood Cell Orders
  - Request an "ABO/Rh Type and Antibody Screen", and indicate the amount of products needed, priority, any special requirements of the patient (CMV-, Irradiated, etc.), on **F.0495 Transfusion Medicine Request Form**.
- Platelet Orders:
  - The Blood Center only supplies Apheresis (Single Donor) Platelet products.
  - Patients must be wearing a Typenex (blood bank) wristband receive platelets. Testing required, at a minimum, is an ABO/Rh.
  - If the patient is already wearing a Typenex (blood bank) wristband issued by the Blood Center and an ABO/Rh has been performed, platelets may be issued without collecting additional samples for testing. Send a request (**F.0495**) for products only.
  - If the patient is not wearing Typenex wristband issued by the Blood Center, collect a properly labeled sample (one tube is sufficient). Send sample(s) with a request (**F.0495**) for product and ABO/Rh testing (antibody screen not necessary).
- Plasma Orders:
  - The Blood Center currently *does not* provide plasma products.

**Product Issue**

- Products can either be picked up by your courier, or delivered by the Blood Center. Once issued, products *cannot* be returned.
- Upon delivery/prior to pickup of products, send or fax the following patient identification information to the Blood Center Laboratory:
  - ***Patient name, Social security number*** (or another unique identifying number documented on the sample submitted for testing/wristband) and ***Typenex (wristband) number***

***Note: This information should be obtained from the patient's armband attached to the patient-NOT the patient's chart. If you discover that the patient is NOT wearing the armband at the time of the anticipated transfusion, call the Blood Center laboratory immediately.***

- The Blood Center technologist will review this information. Blood products will not be released until this information is found to be accurate with sample submitted for testing. Discrepancies in the identification of the sample submitted for testing will require sample recollection and repeat of all testing.
- Products will be delivered in coolers labeled “**Transfusion Services**”.
- Transfusion must be started by the time documented on the outside of the cooler.
  - If transfusion is unexpectedly delayed and cannot be started by the time noted on the cooler, call the Blood Center laboratory for assistance. ***Products cannot be returned from facilities that do not have a BTC approved, validated refrigerator to store blood.***

### **Transfusion Requirements**

- Immediately before transfusion, the transfusionist and one other individual shall, in the presence of the recipient, verify the following information matching the blood or blood component with the intended recipient:
  - *The intended recipient's identification (Name, Social security number (or other unique identifying number used to label the samples and wristband, i.e. MR#, DOB) and Typenex (wristband) number).*
  - *The intended recipient's ABO group and Rh type.*
  - *The donation (product) identification number.*
  - *The donor ABO group and Rh type.*
  - *The interpretation of crossmatch tests.*
  - *Special transfusion requirements.*
  - *The expiration date of the product (product is not expired).*

***Note: This information must be verified with the patient's armband on the patient-NOT from the patient's chart. If you discover that the patient is NOT wearing the armband at the time of the anticipated transfusion, call the Blood Center laboratory immediately.***

**Document this verification by signing the transfusion tag that accompanies each product.**

- Once removed from the cooler, the entire unit must be transfused within **4 hours**.
- The Blood Center does not provide infusion sets and does not maintain transfusion Standard Operating Procedures. These items are the responsibility of your facility.

### **Suspected Transfusion Reactions**

- Signs and symptoms of a transfusion reaction:
  - Febrile- fever and/or chills
  - Allergic- Mild urticaria, itching, flushing
  - Severe allergic- Blood pressure changes, asthma, edema, nausea/vomiting, diarrhea
  - Hemolytic- fever, chills, chest/flank pain, hypotension, nausea/vomiting, flushing, dyspnea, hemoglobinuria, DIC, oliguria, pain at needle site, shock, generalized bleeding
- Proper steps to take:
  - **Stop the transfusion immediately**, but keep the IV open
  - Recheck the bedside verification
  - Notify the ordering physician STAT
  - Notify the Blood Center Laboratory
  - The Blood Center will fax **F.0662 Suspected Transfusion Reaction Investigation** to you, and guide you through the investigation process. Complete the investigation form as soon as possible and return it to the Blood Center along with the following items:
    - Product bag and all attached solutions in a biohazard bag. **Remove all needles!**
    - A plain red top tube (no serum separator) and an EDTA tube properly labeled according to the Sample Collection section above. Label tubes “post-reaction”.
  - BTC laboratory will perform a STAT investigation and notify your facility of testing results.
  - **DO NOT** transfuse additional blood products without instruction from BTC laboratory. Medical Director review and approval is required prior to transfusions subsequent to a transfusion reaction.

### Emergency Release of Blood Products

- If blood products are needed prior to obtaining a sample for testing, call the Blood Center laboratory. Be prepared with the following information:
  - *Patient's name*
  - *Requesting Physician* (the physician will be required to sign for responsibility to transfuse uncross-matched units).
- Collect properly labeled samples according to the Sample Collection section above. **Please ensure samples are ready for pick-up at the time the uncrossmatched products are delivered to ensure STAT processing.**
- The employee receiving the uncrossmatched products must sign an Emergency Release form (**F.0758 Emergency Release of Blood Products Pending Compatibility Testing**) acknowledging receipt of the products
- The physician and Transfusionist must then sign **the Emergency Release form** acknowledging responsibility for the transfusion. Fax the completed form to BTC as soon as possible.
- Upon return of the sample to BTC laboratory, testing will be performed STAT and results will be called to your facility.
- If the emergent situation continues, it is recommended to transport the patient to the nearest hospital, as the Blood Center cannot support transfusion requirements of an ongoing nature.