

**DEACONESS HOSPITAL BLOOD BANK
Evansville, Indiana**

Departmental Procedure BB-2.7

December, 1996

**RELEASE OF BLOOD IN AN EMERGENCY
TRAUMA ACTIVATION**

PRINCIPLE

In an emergency, the patient's physician must weigh the risk of transfusing uncrossmatched or partially crossmatched blood against the hazard of waiting for a completed crossmatch test. If he believes the urgency of the situation warrants the release of the blood before the crossmatch is completed, he must indicate both the urgency and acceptance of additional risk in writing. Such a release does not absolve the Blood Bank from its responsibility to issue properly grouped and labeled blood. In situations when blood is needed before completion of routine compatibility tests, the following standards apply:

1. Recipients whose ABO and Rh types have been determined by the Blood Bank without reliance on previous records may receive type-specific blood before tests for compatibility have been completed.
2. Recipients whose ABO type is not known shall receive type O Neg. Red Blood Cells. Two units may be given before switching to the patient's known group and type.

In the event of Trauma Activation, 2, O neg RBC and 2, O pos RBC will be issued to the Emergency Department. As soon as the patient's type has been established, blood bank personnel will switch the O units to the correct patient's type.

3. When AB recipients are transfused with type A or B blood, the latter shall be in the form of Red Blood Cells.

****NOTE:** Blood group cards from Blood Banks, "dog tags", or driver's licenses must not be accepted as evidence of blood group.

PROCEDURE

1. Trauma Activation Patient

The Emergency Department will make the determination and will activate Trauma Protocol using the designated pagers if the patient meets a set criteria. The pager will display an estimated time of arrival (ETA) after the numbers "911".

The patient will be registered in DNET by Emergency Room personnel. If the patient's information is unknown, the name will be in the following format: Trauma, 04301 (the date followed sequentially by the number of trauma patients for that day). Blood bank will be notified when the patient is registered. The technologist will place the order in DNET for 4 units of red blood cells (-12484).

Allocate 2 O neg and 2 O pos units to the patient. The Emergency Room will notify blood bank if the patient is female and of child bearing age. In that instance, due to the critical shortage of O negative blood, allocate 2 O neg units and complete the order with type specific blood as soon as possible. The trauma charge nurse will inform the blood bank if the situation does not warrant waiting for type specific blood. In that instance allocate 2 O positive red cells.

Prior to issue, place Safe-T-View stickers on the allocated units of blood. Also place an orange "Uncrossmatched Blood" sticker on the unit of blood. Use the "Emergency Issue" function from BOP and issue the blood prior to the ETA that was displayed on the pager. Box up the blood with ice from the freezer and as long as you are not the only technologist in the department, take the blood to the Emergency Department and give the box to the Trauma charge nurse. The box will remain with the patient until it has been determined that the urgency for immediate transfusion has passed. If you are the only technologist in the department, give the box of blood to the LSS person in R/C and they will see that the blood is delivered to the Trauma charge nurse.

The physician or person delegated by him must sign the EMERGENCY TRANSFUSION REQUEST section of the Crossmatch Transfusion Form stating the clinical situation is sufficiently urgent to require release of blood before completion of compatibility testing. This section does not have to be completed until after the situation is under control.

The blood will be returned to the blood bank once it has been determined that the urgent need for transfusion has passed. Verify that a safe temperature has been maintained (the Safe-T-vue sticker is still green). If the units are acceptable (even if the return time is greater than 30 minutes), return them in the computer system and place them back on the shelf. Complete the testing on the patient and allocate type specific, compatible units of blood. Complete compatibility testing on the units of blood that had been previously issued. Release any non-type specific units that were allocated but not transfused during the initial trauma response.

In cases where the patient demographic information is unknown, you will need to notify the LIS computer support person (pager 467-4897) to update the patient information once the correct information has been provided. Provide a corrected red blood bank band to the emergency department or other unit of the hospital once the demographic information has been corrected.

2. Uncrossmatched or Partially Crossmatched (Non-Activated Emergency)

The physician or person delegated by him must sign the EMERGENCY TRANSFUSION REQUEST stating the clinical situation is sufficiently urgent to require release of blood before completion of compatibility testing. The signature does not have to be obtained prior to the issue of the blood. A bright orange label stating that the unit of blood is not crossmatched or is partially crossmatched shall be placed on the donor unit prior to issue. Blood is issued following normal procedures. If a negative antibody screen result has been recorded prior to the emergency situation, group specific blood will be issued following an immediate spin crossmatch. The crossmatch is complete and the physician is not required to sign a release form. If the clinician cannot wait for the antibody screen to be completed, release the blood at whatever stage of testing it is in. Complete the "Emergency Release" section of the Crossmatch Transfusion Form noting what testing has been completed prior to issue. Continue the testing after the release of blood. Once completed, send the routine paperwork (requisition and bag label) to the unit.

If blood is urgently needed on a patient who has a positive antibody screen then the physician must weigh the risk of transfusing antigen positive blood (which corresponds to the patient's antibody) versus waiting for antigen negative blood to be found. If time allows the crossmatch should be completed and only compatible units issued. Notify the pathologist on call of the situation as he may be able to provide information to the ordering physician concerning the risks of transfusing using antigen positive blood.

3. Incompatible Blood

Physicians treating patients with identified auto-antibodies (condition or drug induced) where the crossmatch shows incompatibility must sign an emergency release form in order for their patient to receive blood. In these cases, the risk of transfusion is minimal as long as it has been determined that there are no underlying alloantibodies. The pathologist on call should be notified prior to transfusion.

****NOTE:** Whenever possible, only compatible blood should be issued for transfusion.

Fill out an Emergency Transfusion Request on the bottom of the Crossmatch Transfusion Report following the example in the Blood Bank Paperwork Manual pg. 31.

REFERENCE: AAAB Technical Manual, Eleventh Edition, 1993
AAAB Standards for Blood Banks and Transfusion Services,
Fifteenth Edition, 1993.

Revised 10/80 LT
Reviewed 5/83 LT
Reviewed 4/86 JD
Reviewed 6/89 PS
Revised 7/92 PS
Reviewed 9/94 PS
Reviewed 12/97 PS
Revised 8/00 PS/YSL
Revised 4/02 PS/YSL/HWB

Reviewed 6/81 LT
Revised 1/84 LT
Reviewed 7/87 JD
Revised 7/90 PS
Reviewed 8/93 PS
Reviewed 8/95 PS
Reviewed 12/98 PS
Reviewed 12/01 PS

Reviewed 6/82 LT
Reviewed 1/85 LT
Revised 3/88 PS
Reviewed 8/91 PS
Revised 3/94 PS
Reviewed 12/96 PS
Reviewed 12/99 PS
Reviewed 2/02 PS