TRANSFUSION SERVICE TEST REQUEST

In order to process a Transfusion Service request, the following fields are mandatory and must be legible.

STAMP top of request with PATIENT'S ID PLATE.

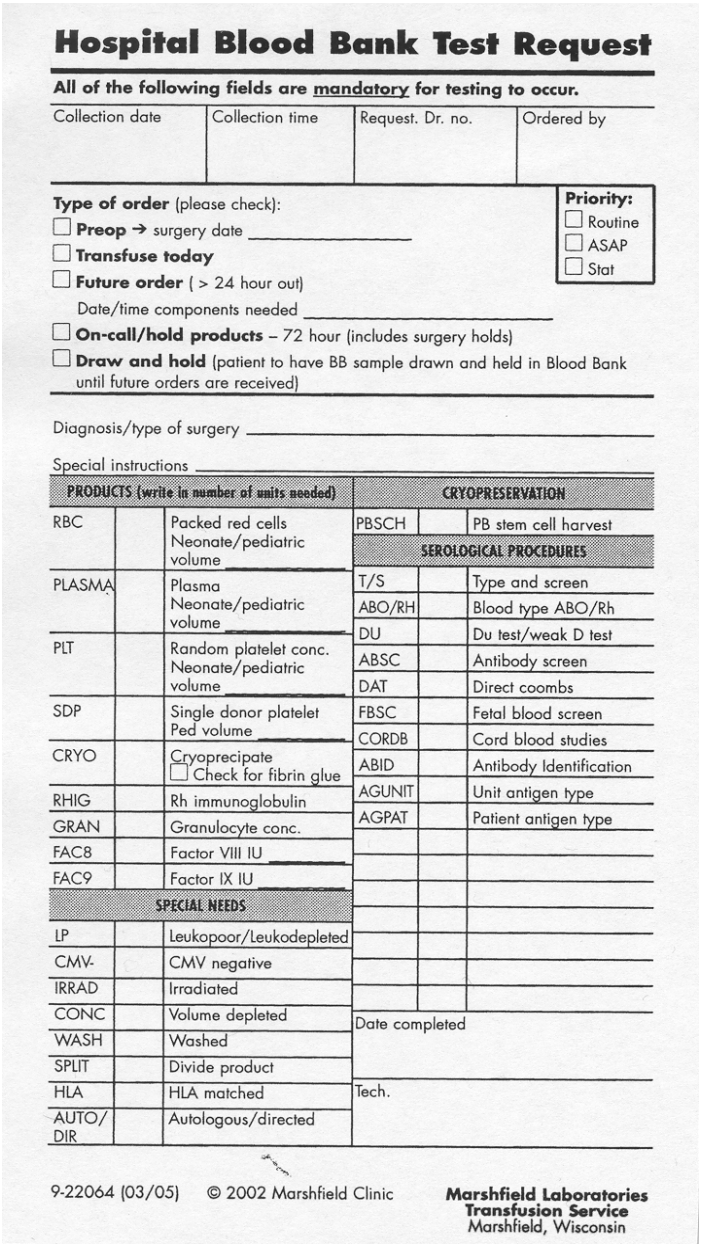
If no plate is available, print the following: Patient name, Medical Record Number, and Account number (hosp. request).

COLLECTION DATE/TIME. Write in date of anticipated transfusion or Transfusion Service specimen draw.

REQUEST. DR. NO. Fill in number of requesting physician.

ORDERED BY. Initials of person filling out order.

INCOMPLETE or ILLEGIBLE requests will result in delay of patient testing and/or product set-up



Hospital Blood Bank Test Request

All of the following fields are mandatory for testing to occur.

Collection date	Collection time	Request. Dr. no.	Ordered by

Type of order (please check):
☐ **Preop** → surgery date _____
☐ **Transfuse today**
☐ **Future order** (> 24 hour out)
Date/time components needed _____
☐ **On-call/hold products** – 72 hour (includes surgery holds)
☐ **Draw and hold** (patient to have BB sample drawn and held in Blood Bank until future orders are received)

Priority: ☐ Routine ☐ ASAP ☐ Stat

Diagnosis/type of surgery _____

Special instructions _____

PRODUCTS (write in number of units needed)		
RBC		Packed red cells Neonate/pediatric volume
PLASMA		Plasma Neonate/pediatric volume
PLT		Random platelet conc. Neonate/pediatric volume
SDP		Single donor platelet Ped volume
CRYO		Cryoprecipate ☐ Check for fibrin glue
RHIG		Rh immunoglobulin
GRAN		Granulocyte conc.
FAC8		Factor VIII IU
FAC9		Factor IX IU
SPECIAL NEEDS		
LP		Leukopoor/Leukodepleted
CMV-		CMV negative
IRRAD		Irradiated
CONC		Volume depleted
WASH		Washed
SPLIT		Divide product
HLA		HLA matched
AUTO/ DIR		Autologous/directed

CRYOPRESERVATION		
PBSCH		PB stem cell harvest
SEROLOGICAL PROCEDURES		
T/S		Type and screen
ABO/RH		Blood type ABO/Rh
DU		Du test/weak D test
ABSC		Antibody screen
DAT		Direct coombs
FBSC		Fetal blood screen
CORDB		Cord blood studies
ABID		Antibody Identification
AGUNIT		Unit antigen type
AGPAT		Patient antigen type

Date completed

Tech.

9-22064 (03/05) © 2002 Marshfield Clinic **Marshfield Laboratories Transfusion Service** Marshfield, Wisconsin

Any combination of components, products, and/or procedures can be ordered on one form, provided the date needed is the same for all.

ORDER PRODUCTS

PRODUCT REQUEST

-Request is for blood products/components to be set-up

1. **Fill in mandatory fields at top of request.**
2. **Check type of order.**
   → *Pre-op:* Products and/or testing required for surgery. Specify date of surgery. *CHECK PRIORITY IN BOX*.
   → *Transfuse today:* Orders read to transfuse products/ components. *CHECK PRIORITY IN BOX*.
   → *Future order*: Products/components needed for possible transfusion >24 hours out. Specify date as to insure products are available in the Transfusion Service and/or a specimen draw time is arranged with phlebotomy.
   → *On-call/hold products:* Desired number of units will be held for 72 hours. RBCs will be crossmatched. FFP will *not* be thawed and platelets will *not* be pooled until order to transfuse is received in transfusion service. All held products will be released at 0700 on the third day unless further orders are received.
   → *Draw and Hold:* Patient will have a BB sample drawn on date specified and held in BB. Another written order must be obtained before testing on that sample will begin.
3. **Write in the number of units of the particular product or component needed.**
   → *If a volume is specified on physician orders (neonatal/peds patients) write in space provided.*
   → *For factor orders, specify # of IUs required in space provided.*
4. **Check any specials needs as appropriate.**

ORDER TESTS

SEROLOGICAL TEST REQUEST

-Request is for Transfusion Service testing, i.e., Type and Screen, DAT, Cord Blood Studies

1. **Fill in mandatory fields at top of request.**
2. **Check appropriate priority.**
3. ***Check desired serological procedure.***
   →If request is for Type and Screen for surgery, check Pre-op under type of order and fill in date of surgery.

STEM CELL HARVEST REQUEST

-Please call Transfusion Service 16262 for arrangements.

Pink form-Hospital Use White form-Clinic Use

Revised May 2009
J. Weyhmiller

RELEASE OF BLOOD FOR THE TRANSFUSION

TO OBTAIN BLOOD COMPONENTS OR PRODUCTS FOR TRANSFUSION, unit must call with the patient's identification (NAME and MEDICAL RECORD NUMBER) to Transfusion Service. The technologist will issue the product in the Transfusion Service computer system and tube products to unit.

1. Only one unit of blood/blood products will be issued at any one time. An exception may be made in extreme emergencies when the physician desires to administer two units intended for the same patient at one time.

2. Blood will not be issued at the same time for two patients on the same nursing unit.

3. Blood should not be stored on the nursing unit longer than fifteen (15) minutes before the start of the transfusion. If problems occur prior to the start of the infusion, the unit should be returned to Transfusion Service immediately.

4. Blood must NOT be stored in unit refrigerators.

5. Factor concentrates will be picked up in Transfusion Services by transport personnel.

RELEASE OF BLOOD TO OBSTETRICS for surgical procedures.
RELEASE OF BLOOD TO EMERGENCY ROOM

In certain cases where blood is required to be immediately on hand on the nursing unit, but where the need for transfusion is uncertain, blood will be issued in regulation shipping containers. The blood is packed on ice and the container will maintain the proper storage temperature for several hours.

Products released in this manner should be returned to Transfusion Service as soon as the surgical procedure or emergency situation is completed.

RECIPIENT IDENTIFICATION

1. The recipient identification should be confirmed by two people, at least one of whom must be a registered nurse, MD, intern, or anesthetist.

    a. If possible, the recipient should be asked to state his/her name.

    b. The patient identification number written on the label must be compared to the patient identification armband.

    c. Both transfusionists shall verify all information identifying the product with the intended recipient has been matched in the presence of the recipient, item by item.

2. The transfusionist(s) shall sign the form in the space(s) provided.

SAINT JOSEPH'S HOSPITAL/MARSHFIELD CLINIC
COMBINED MEDICAL RECORD

Investigation of Reported Transfusion Reaction

MARSHFIELD LABORATORIES TRANSFUSION SERVICE
MARSHFIELD, WISCONSIN

Nursing Service Investigation

Instructions to nursing service

1. Stop infusion immediately; begin saline drip; contact physician
2. Call Lab to draw stat blood sample
3. Check type of reactions; record vital signs; complete patient history
4. Return bag and Blood Tubing to Lab

Donor no. _____
Component type _____
Time transfusion started _____
Time transfusion stopped _____
Amount given _____ ml
Concurrent IV fluid/med. _____

	Before Transfusion	After Transfusion
Temp.		
B.P.		
Pulse		
Month/Day/Year	/ /	/ /
Time		

History

Diagnosis _____
No. of prior transfusions _____
Reactions _____
No. of pregnancies _____

Symptoms (specify)

☐ Urticaria
☐ Chills
☐ Pain (location) _____
☐ Dyspnea
☐ Other _____

Transfusion Service Notified:

_____
Signature/Title

Date ____/____/____ Time: _____
Month Day Year

Laboratory Investigation

Immediate investigation Time arrived in Lab _____ Order ID _____

1. Patient identified check: Copy the patient identification number from the
   Patient wristband (as recorded on component label) _____
   Test request form _____ Component label _____
   Pre-infusion sample _____ Post-infusion sample _____
2. Visual inspection:
   Pre-transfusion serum: Date/time drawn _____ Appearance _____
   Post-transfusion serum: Date/time drawn _____ Appearance _____
3. Post-transfusion urine supernatant: ☐ Yes ☐ No
   Color _____ Occult blood: ☐ Yes ☐ No
4. Direct AHG on recipient blood
   Post-transfusion specimen: ☐ Neg ☐ Pos

Tech. _____ Date ____/____/____/____
SIGNATURE/TITLE MONTH DAY YEAR TIME

Reviewed by _____ Date ____/____/____
SIGNATURE/TITLE MONTH DAY YEAR

Suspected hemolytic reactions

Indication of compatibility: ☐ Compatible ☐ Incompatible
Presence of irregular antibodies: ☐ Yes ☐ No
Antibodies identified _____
Reviewed by _____ Date ____/____/____
SIGNATURE/TITLE MONTH DAY YEAR

Conclusion and recommendations

Original - Transfusion Service – Copy - Chart
25081519 Rev 6/08

_____ ____/____/____
BLOOD BANK MEDICAL DIRECTOR MONTH DAY YEAR

SAINT JOSEPH'S HOSPITAL/MARSHFIELD CLINIC
COMBINED MEDICAL RECORD

Investigation of Reported Transfusion Reaction (continued)

MARSHFIELD LABORATORIES TRANSFUSION SERVICE

General Instructions

1. Whenever possible, the reaction investigation must be done by technologist other than the one who did the original testing.
2. The reaction investigation must be reviewed by the Transfusion Service Medical Director or designee.
3. If hemolysis or turbidity is noted in either the post transfusion specimen or the supernatant donor plasma, notify the Transfusion Service Medical Director or the Transfusion Service Manager immediately.

   Person notified _____ Date ____/____/____ Time:_____
   MONTH DAY YEAR
4. The following guidelines can be followed for suspected reactions.
   a. Allergic - clerical check, DAT and ABO/Rh performed post transfusion sample.
   b. Febrile - clerical check, DAT and ABO/Rh perform post transfusion sample.
   c. Hemolytic - clerical check, perform group and type on pre and post transfusion samples, DAT pre and post transfusion samples. Repeat antibody screen and crossmatch using pre and post transfusion samples. Use routine technique. Other tests as requested by Transfusion Service Medical Director or Transfusion Service Manager.

Serologic Testing

To be completed if symptoms are other than febrile or allergic (i.e., rash, itching, urticaria). Must be completed within 6 hours.

Patient	ANTI A	ANTI B	ANTI D	Rh CONT	A_1 CELLS	B CELLS	Weak D				TYPE	Rh	S.C.I.			S.C.II			DAT		Irregular Antibody		Unit No.	TYPE	Rh	Crossmatch				
							AHG	CC	AHG	CC			22C	AHG	CC	22C	AHG	CC	AHG	CC	ND	D				22C	AHG	CC	COM	INC
Patient - pre-infusion																														
post-infusion																														
Donor - segment																														
container																														

Additional Testings: to be complete as ordered by the Transfusion Service Medical Director

	STAT	24-hour		STAT	24-hour
Urine analysis: Color			Bilirubin: Direct		
RBCs			Indirect		
Hgb			Total		
Plasma hemoglobin			Creatinine		
Haptoglobin					

Blood Culture: Date sent ____/____/____ Result _____
MONTH DAY YEAR

Technologist _____ Date____/____/____ Time: _____
SIGNATURE /TITLE MONTH DAY YEAR

Reviewed by _____ Date____/____/____ Time:_____
SIGNATURE/TITLE MONTH DAY YEAR

25081519 Rev 6/08

MARSHFIELD CLINIC/SAINT JOSEPH'S HOSPITAL
COMBINED MEDICAL RECORD

Marshfield Laboratories – Blood Bank
Marshfield, Wisconsin

Blood Component-Product Transfusion Record

Blood Components	Blood Components	Blood Components
1	2	3
4	5	6
7	8	9

Blood Component-Product Transfusion Record (Continued)

Blood Components	Blood Components	Blood Components
10	11	12
13	14	15
16	17	18

COMPONENT/PRODUCT IDENTIFICATION

1. The information on the Component/Product Label must be compared to the information on the container.

2. Check:

    a. Product identification (name)
    b. Blood type (if applicable)
    c. Unit number

Recipient identification procedures must take place at bedside.

GUIDELINES FOR BLOOD TRANSFUSION

1. Only normal saline may be used to start the infusion of blood components or products. If the same IV used for another solution is to be used for the blood infusion, it must be rinsed with normal saline prior to the start of the blood component or product infusion.

2. Normal saline (usually 50-100 cc's) may be mixed with packed cells to facilitate infusion.

3. No medications may be injected into or infused with blood components or products.

4. Infusion filters may be used for several units, but should be changed every 6-8 hours.

5. Normal infusion rates for blood is 40-60 drops per minutes (1-1/2-3 hours per unit).

6. Infusion should be complete within four hours.

7. The transfusionist should take and record the patient's temperature, pulse, and blood pressure prior to starting the unit and at the completion of infusion.

8. The transfusionist should remain with the patient for at least 15 minutes after infusion is started and should check the patient at 15-30 minute intervals for any evidence of transfusion reaction.

9. The Blood Component/Product Label must be completed properly and must be placed on the patient transfusion record in accordance with Federal regulations.

10. Immediately report to Transfusion Service patients transferred to St. Joseph's Hospital after experiencing a transfusion reaction at another facility.

UNFAVORABLE EFFECTS OF TRANSFUSION

1. Allergic, Febrile, and Hemolytic Transfusion Reactions, Septicemia.

    Transfusion reaction is defined as any unfavorable or adverse effect of the transfusion of blood components or products.

    Symptoms:

    a. Feeling of heat along the vein, into which the blood is being infused, and flushing of the face.
    b. Pain in the lumbar region.
    c. Constricting pain in the chest.
    d. Fever.
    e. Chills.
    f. Dyspnea.

g. Hypotension.
h. Urticaria, itching.
i. Rash.
j. Nausea, vomiting.
k. Headache.
l. Renal failure, bloody or black urine.

In-patients who are anesthetized or under the influence of drugs during transfusion, the only symptoms of reaction may be:

a. Hypotension despite apparently adequate replacement of blood, or
b. Abnormal bleeding, i.e., oozing at venipuncture or surgical sites.

NOTE: The most common cause of hemolytic reaction is the failure to correctly identify the blood sample drawn from the patient or to transfuse the wrong unit of blood to him/her.

2. Transmission of Disease

a. Viral hepatitis - Only serum albumin and Hespan are considered to be "safe." Deglycerolized red cells may have reduced incidence.
b. Malaria.
c. Syphilis.
d. Cytomegalovirus.
e. EB Virus
f. Hepatitis C
g. Acquired Immune Deficiency Syndrome (AIDS)
h. Babesiosis

3. Circulatory Overload -- Use component therapy whenever possible.

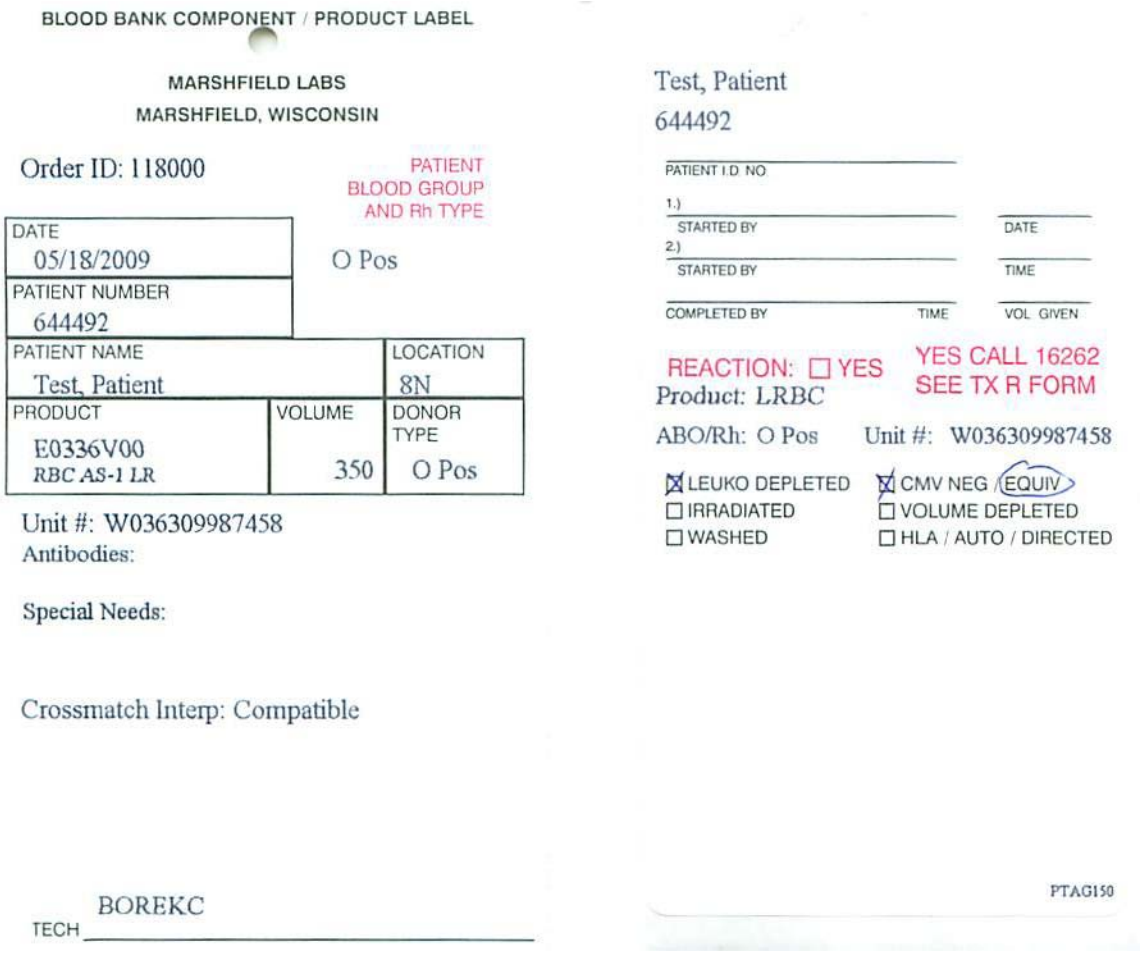
4. Alloimmunization:

- Development of antibodies against foreign red cell antigens -- increased difficulty in obtaining suitable units of blood for transfusion.
- Development of leukocyte or platelet antibodies may result in refractoriness to platelet transfusions.

References

1. Blood Transfusion in Clinical Medicine by Mollison, Fifth Edition.

2. Walker, R.H.: "Special Report: Transfusion Risks," Amer. J. Clin. Path., 88:374-378, 1987.



BLOOD BANK COMPONENT / PRODUCT LABEL

MARSHFIELD LABS
MARSHFIELD, WISCONSIN

Order ID: 118000

PATIENT BLOOD GROUP AND Rh TYPE

DATE	
05/18/2009	O Pos
PATIENT NUMBER	
644492	

PATIENT NAME		LOCATION
Test, Patient		8N
PRODUCT	VOLUME	DONOR TYPE
E0336V00 *RBC AS-1 LR*	350	O Pos

Unit #: W036309987458
Antibodies:

Special Needs:

Crossmatch Interp: Compatible

TECH BOREKC

Test, Patient
644492

PATIENT I.D. NO

1.) STARTED BY DATE
2.) STARTED BY TIME
COMPLETED BY TIME VOL. GIVEN

REACTION: ☐ YES
YES CALL 16262
SEE TX R FORM

Product: LRBC

ABO/Rh: O Pos Unit #: W036309987458

☒ LEUKO DEPLETED ☒ CMV NEG / EQUIV
☐ IRRADIATED ☐ VOLUME DEPLETED
☐ WASHED ☐ HLA / AUTO / DIRECTED

PTAG150

Description

1. This is a two-part form that is attached to any component or product issued by the Blood Bank.
2. Right-hand side is the chart copy.
3. Left-hand side may be discarded.

Completion of the Form

1. Section I -- Completed by a Transfusion Service technologist. Information includes:

    a. Patient name, identification number, and blood type.
    b. Donor number and blood type (if applicable).
    c. Whether crossmatch is compatible or not crossmatched.
    d. Component name and volume issued.
    e. Date prepared.
    f. Technologist's initials.

2. Section II -- Completed by the transfusionist(s). Information includes:

    a. Patient identification number (from wristband).
    b. Transfusionist(s) signature.
    c. Date of infusion, time started and completed.
    d. Infusion completed and time.
    e. Volume given (may be less than volume issued).

    The Identification Procedure with the blood components must take place at patient's bedside.

Disposition of the Form

1. Right-hand side is attached to the Blood Transfusion Record by the transfusionist.
2. Left-hand side may be discarded.

If there is evidence of transfusion reaction, the transfusionist is to complete an "Investigation of Reported Transfusion Reaction" form (25081519). See example included in this section.

<u>TRANSFUSION REACTION FORM</u>

1. The Transfusion Reaction form (25081519) should be stamped in the upper right-hand corner with the patient's demographic plate. See example included in this section.

2. This completed form should be sent to Transfusion Service by the transfusionist.

3. The original form is kept in the Transfusion Service.

4. A copy of this form is placed in the Laboratory Report Section.

<u>BLOOD TRANSFUSION RECORD</u>

1. The Blood Component-Product Transfusion Record, form #9-22070 (2/97) should be stamped in the upper right-hand corner (Hospital) or upper left-hand corner (Clinic) with the patient's demographic plate. See example included in this section.

2. This form should be placed in the Laboratory Report Section by the transfusionist.

3. This is a composite record. A Blood Component/Product Label is attached at the conclusion of each infusion.

4. The spaces on the record are numbered. Both sides of the form can be used.

WARM BLOOD TRANSFUSION

Patients that have a specific or nonspecific cold agglutinin in their plasma may have an adverse transfusion reaction if they are transfused with cold blood.

Blood may be warmed prior to infusion to avoid this problem, using the blood warmer which is issued from Central Stores.

Regulations require that the infusion temperature be monitored and recorded. A warmed blood temperature record is issued along with the blood warmer.

Units issued for patients having cold agglutinins will be labeled with a caution sticker stating that the patient has a cold agglutination and that a warming coil is to be used.

BIOLOGIC TRANSFUSION METHOD

In patients having certain circulating red cell antibodies (autoimmune hemolytic anemia, cold agglutinin disease, high frequency antibodies, etc.), crossmatch-compatible blood may not be available. If it is necessary to transfuse these patients, the Biologic Transfusion Method should be used.

Procedure

1. Transfuse 20 cc's of blood slowly (10-15 minutes).
2. Stop transfusion and observe the patient for indication of transfusion reaction (10-15 minutes).
3. Transfuse 20 cc's of blood slowly (10-15 minutes).
4. Stop infusion and observe the patient for an additional 10-15 minutes for signs of reaction.

   DO NOT LEAVE PATIENT UNATTENDED DURING THIS PERIOD.
5. If there is no indication of reaction, the remainder of the unit may be infused.
6. Check the patient frequently (10-15 minute intervals) until the infusion is complete.

This procedure should be followed for each unit of blood that is infused.

OUTPATIENT TRANSFUSION PROCEDURE

1. Marshfield Clinic Oncology will place laboratory orders (including Type and Hold) and send Clinic Blood Bank slip to Transfusion Services.
2. Patient will report to scheduled lab station in the Marshfield Clinic for lab draw.
3. Phlebotomy will place armband on patient and draw ordered labs.
4. Marshfield Clinic Oncology will:
   a. Determine if transufusion is required, based upon laboratory results.
   b. Notify Blood Bank (ext. 16262) of patient's need for transfusion and specify number of units and special needs (i.e. CMV negative, irradiated, leukodepleted, random donor single single donor HLA matched.)
   c. Notify 8N outpatient HUC of transfusion need and FAX transfusion orders if applicable or requested by 8N.
   c. Per 8N HUC direction, inform patient when to report to 8N outpatient unit for transfusion.
5. Blood Bank will:
   a. Determine if more than 72 hours has elapsed since patient's last type and cross. If necessary Blood Bank will type and cross-match using Type and Hold specimen.
   b. Notify 8N outpatient HUC immediately if matching complications arise (i.e. antibodies) that will result in delays.
6. 8N outpatient HUC will:
   a. Determine if patient has active transfusion orders. If patient does not have active transfusion orders, ask Marshfield Oncology to FAX transfusion orders.
   b. Complete 8N Outpatient Service Request (form #25080259)
   c. Schedule patient's appointment and inform Marshfield Clinic and the 8N outpatient nurse of the patient's appointment time. Appointment should be no sooner that 3 hours after notification to allow time for Blood Bank to prepare blood.
   d. Send SJH Blood Bank Test Request (form #922064) to Blood Bank.
   e. Keep Marshfield Clinic armband on patient when patient arrives for outpatient treatment on 8N.

SUMMARY CHART OF BLOOD COMPONENT

COMPONENT	MAJOR INDICATIONS	CONTRADICTIONS	SPECIAL INSTRUCTIONS	STORAGE TIME	FILTER	INFUSION RATE
Cryoprecipitated Antihemophilic Factor 15 cc/bag (u 80-120 units/bag)	Hemophilia A; von Willebrand's Disease; Hypofibrinogenemia; Factor VIII Deficiency.	Coagulation defect not defined.	ABO compatible preferred, but not necessary. Rapid infusion and frequent repeat doses may be necessary.	1 yr frozen; 6 hrs after thawed. Four hours after pooling.	Blood Component Infusion Set	IV Push
Factor VIII Concentrate, 10 cc/vial (u 260 units/vial)	Hemophilia A; von Willebrand's Disease; Factor VIII Deficiency.	Coagulation defect not defined.		1-2 yrs; 3 hrs after reconstitution.	Drawn through filter needle	IV Push
Leukocyte Concentrate, 300 cc ($1x10^{10}$ WBC's) (80% granulocytes)	Neutropenia and infections.	Infections responsive to antibiotics.	Must be ABO compatible. Crossmatch required.	24 hours	Blood Component Infusion Set	45-90 min. Complete infusion within four hours.
Platelet Concentrate Random Donor, 50 cc/bag ($5.5x10^{10}$ platelets) Single Donor ($3.0x10^{11}$ platelets/ 180 cc bag)	Bleeding from thrombocytopenia or platelet function abnormality.	Plasma coagulation deficits; conditions with rapid platelet destruction.	ABO compatible preferred, but not necessary. Allow two additional hours' preparation time for volume-depleted platelets.	5 days; 4 hrs after pooling.	Blood Component Recipient or Infusion Set	30-45 min. (IV Push for small volumes). Complete infusion within 4 hours.
Red Blood Cells, 350 cc	Symptomatic anemia; decreased red cell mass.	Shock; treatable anemia; coagulation deficiency.	Must be ABO compatible; crossmatch required	42 days	Standard 170 micron filter	40-60 dps/min. (1-1/2-3 hrs) Complete infusion within four hours
Red Blood Cells, Leukocyte Poor, 250 cc	Febrile reactions from leukocyte antibodies.	As above.	As above.	As above.	Red cell leukodepletion filter (only if unit is not LP upon arrival)	As above

SUMMARY CHART OF BLOOD COMPONENTS

COMPONENT	MAJOR INDICATIONS	CONTRADICTIONS	SPECIAL INSTRUCTIONS	STORAGE TIME	FILTER	INFUSION RATE
Red Blood Cells, Deglycerolized, 250 cc	As above, also IgA sensitization	As above.	Caution: "Donut" infusion bag easily spiked and contaminated with infusion set coupler.	As above.	Standard 170 micron filter.	As above.
Red Blood Cells, Washed, 250 cc	As above.	As above.	As above.	As above.	As above.	As above.
Rh Immune Globulin, 1 cc	Postpartum Rh negative D^u Negative Women: 1. Miscarriage 2. Abortion 3. Delivery of Rho(D) or D^u positive infant.	Not to be given to Rho(D) positive or D^u positive women. Not to be given if Anti-D is already present.	Given I.M. Must be given within 72 hours after delivery. Fetal Blood Screening Test required on postpartum samples.	1 year	None	I.M.
Single Donor Plasma, Fresh Frozen, 200 cc., 45 cc.	Deficient of plasma; coagulation factors.	Condition responsive to specific concentrate.	Must be ABO compatible.	1 yr. frozen; 24 hours after thawed.	Standard 170 micron filter.	30-40 minutes.

h/home/secpub/referencemanual/bloodbanktestrequest