

Blood/Blood Component Utilization and Administration

Annual Compliance Education



This course contains annual compliance education necessary to meet compliance and regulatory requirements.

Instructions:

To receive credit for completion:

1. Read the content in full.
2. Complete the online exam.

Last Revised: 02/04/16



Carolinan HealthCare System

Blood/Blood Component Utilization and Administration

Welcome

The goal of this course is to provide safety and procedural information to Registered Nurses (RN) and Licensed Practical Nurses (LPN) responsible for administering blood products.

Learning Objectives:

When finished with this course, you should be able to:

- Review best practices with blood utilization
- Define safe blood/blood component administration procedures based on policy
- Outline the process for verification of the right blood product for the right patient
- Discuss requirements for patient monitoring including frequency and documentation
- Identify transfusion reactions and describe treatment for transfusion reactions



Blood/Blood Component Utilization and Administration

Blood Components

Packed Red Blood Cells Leukoreduced (LRPC)

- The only blood product that is routinely crossmatched
- Considered to be “CMV-Safe”
- Used to replace loss of Red Blood Cells (RBC), Hemoglobin

Platelets

- Platelets are either pooled or single donor apheresis product
- Platelets do not need to be ABO-Rh compatible
- Must be stored at room temperature
- Used to replace platelets

Fresh Frozen Plasma (FFP)

- Must be ABO compatible, Rh is not necessary
- Requires 30-60 minutes to thaw plasma
- Used to replace coagulation factors

Cryoprecipitate

- Cryo expires four hours after pooling: Transport at room temperature
- Transfuse ASAP after it reaches patient location
- Primarily used to replace fibrinogen



Blood/Blood Component Utilization and Administration

Proper Utilization of Blood Products

Research indicates that approximately 30% RBC, 25% platelet & 60% FFP transfusions are unnecessary

Healthcare providers have historically used the 10/30 rule, ordering transfusions when Hgb < 10g/dL and Hct < 30g/dL

The American Association of Blood Banks recommends transfusing only when Hgb < 7g/dL, unless the patient is symptomatic or meets exclusion criteria



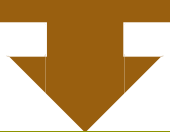
Blood/Blood Component Utilization and Administration

Only Transfuse when Hgb <7g/dL

Transfusion is a risk factor for increased morbidity, mortality and length of stay.



Blood products are a limited resource. Each transfusion increases risk for complications and harm.



Transfusion is a live tissue transplant.



Blood/Blood Component Utilization and Administration

Nursing's Role in Blood Management

Recognize lab values required for transfusion

Respectfully question orders that do not correspond with new guidelines

Minimize blood loss/phlebotomy

Educate patients and families about why we do not treat hemoglobin $>7\text{g/dL}$ unless symptomatic



Blood/Blood Component Utilization and Administration

Blood Component Administration

The RN should make sure:

- The order to transfuse is in the medical record
- There is a signed Blood/Blood Component consent form
- Correct labeling of blood bank specimens
- Patient monitoring before, during and after transfusion
- Patient/Family Education
 - Instruct to report any signs/symptoms of reaction during and after infusion
 - Document on Education Teaching Record (ETR)

Signs and Symptoms of Blood Transfusion Reaction		Signs and Symptoms Details			
<input checked="" type="radio"/> Yes		<input checked="" type="checkbox"/> Anxiety/restlessness <input checked="" type="checkbox"/> Asthma symptoms <input checked="" type="checkbox"/> Back/flank pain <input checked="" type="checkbox"/> BP decrease more than 30 mmHG <input checked="" type="checkbox"/> BP increase more than 30 mmHG <input checked="" type="checkbox"/> Chest pain <input checked="" type="checkbox"/> Chills <input checked="" type="checkbox"/> Diarrhea <input checked="" type="checkbox"/> Diffuse bleeding <input checked="" type="checkbox"/> Dyspnea <input checked="" type="checkbox"/> Facial swelling <input checked="" type="checkbox"/> Fever, greater than 1.8 degrees F above baseline <input checked="" type="checkbox"/> Headache		<input checked="" type="checkbox"/> HR increase more than 40 bpm <input checked="" type="checkbox"/> Hypertension <input checked="" type="checkbox"/> Hypotension <input checked="" type="checkbox"/> Hypoxemia <input checked="" type="checkbox"/> Itching <input checked="" type="checkbox"/> Nausea <input checked="" type="checkbox"/> Non productive cough <input checked="" type="checkbox"/> O2 saturation less than 90% <input checked="" type="checkbox"/> Pain at infusion site <input checked="" type="checkbox"/> Rigors (severe chills) <input checked="" type="checkbox"/> Symptoms of shock or anaphylaxis <input checked="" type="checkbox"/> Urticaria (hives) <input checked="" type="checkbox"/> Vomiting	
Learner	Ability & Readiness to Learn	Method of Teaching	Learner Response		
<input type="checkbox"/> Patient <input type="checkbox"/> Family <input type="checkbox"/> Caregiver <input type="checkbox"/> Significant other <input type="checkbox"/> Other:	<input type="checkbox"/> Receptive <input type="checkbox"/> Non-receptive <input type="checkbox"/> Comatose <input type="checkbox"/> Unresponsive <input type="checkbox"/> Denies need	<input type="checkbox"/> Audio / Visual <input type="checkbox"/> Demonstration <input type="checkbox"/> Group activity <input type="checkbox"/> Handout/booklet <input type="checkbox"/> Interactive devices	<input type="checkbox"/> Demonstrates acceptable knowledge of topic/instructions <input type="checkbox"/> Discussed problem, plan of care, reasons/consequences for treatment <input type="checkbox"/> Family asked questions <input type="checkbox"/> Inattentive/disinterested <input type="checkbox"/> Needs follow up		



Blood/Blood Component Utilization and Administration

Blood/Blood Component Order

- Confirm order to transfuse specific product(s)
- Confirm a current type and crossmatch has been collected within three to seven days (three days preferred) at present facility
 - Contact provider for order to recollect if longer than seven days
 - Repeat crossmatch at receiving facility if patient is a transfer



Blood/Blood Component Utilization and Administration

Blood/Blood Component Consent

A single consent is required per blood component/series of blood components per hospital encounter.

Surgical consent includes:

- Blood component administration
 - Valid for surgical procedure and immediate postop period
 - Should not exceed two hours unless otherwise specified by department policy

Nursing should notify physician if patient or responsible party:

- Has questions
- Refuses to sign consent
- Refuses blood products

Consent for Blood/Blood Components

I _____ understand that I may need a transfusion of a blood product (component) including red blood cells, plasma, platelets, &/or cryoprecipitate. This includes certain other products that may be derived from or contain blood components. By signing this Consent for Blood and/or Blood Components, I have been informed why I need Blood Components, the benefits of this treatment as well as the alternatives to a Blood Component Transfusion. I will accept any blood products that my physician(s) deems necessary.

FROM THE PRODUCTS LISTED IN THIS CONSENT, I HAVE CHOSEN NOT TO ACCEPT THE FOLLOWING:

Refer to Bloodless Medicine and Surgery Policy and Blood Management -Treatment Alternatives Form for a list of other treatment alternatives.

Benefits
Benefits of transfusion include:

- Elevation of blood level of the product transfused
- Prevention of hypoxemia (low oxygen level) and hypotension (low blood pressure)
- Prevention of bleeding, bruising, hemorrhage into a vital organ, gastrointestinal tract, or brain (platelet transfusion)

Risks
Risks of transfusion include:

- Minor reactions such as skin irritation, itching, hives, flushing, headache, nausea, vomiting, diarrhea, pain at infusion site, cough, anxiety
- Fever or chills
- Chest pain, tightness in chest
- Back/flank pain
- Difficulty breathing, rapid heart rate
- Facial swelling, diffuse bleeding
- Transfusion reaction can be in the form of an allergic reaction, febrile reaction, acute hemolytic or delayed hemolytic response.
- A major transfusion reaction is unlikely but remotely possible, and can lead to death.
- Transmission of Infections (e.g. hepatitis, HIV, etc.)


Alternatives
Alternatives to the transfusion include:

- No transfusion, accepting present condition and risks
- Donating my own blood (only if approved for elective surgery with adequate lead time)
- Having someone donate blood on my behalf (directed donation, only available before surgery with adequate lead time)


I have been given an opportunity to ask questions and I am satisfied with the information I have received.

Signature of Patient or Legal Representative (if patient unable to sign)/Relationship to patient
Date: _____ Time: _____

Signature of Witness
Date: _____ Time: _____



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Carolinan HealthCare System
Consent for Blood/Blood Components
Revised 5/15

Patient Identifier



Blood/Blood Component Utilization and Administration

Blood Bank Specimen and Labeling

Hand-label blood bank specimens in front of the patient	
<ul style="list-style-type: none"> • Do not use preprinted labels • All identifiers must be correct and taken from patient ID band • Specimens must be placed in Pink top tube • Adult patients – 6mL tube, Pediatric patients – 3mL tube • Bullets are not acceptable for Blood Bank testing (exception NICU) 	<ul style="list-style-type: none"> • Label must include: <ul style="list-style-type: none"> - Patient name - Medical record # - Birthdate - Room number - Collection date/time - Blood bank ID # - Phlebotomist and witness ID #



Blood/Blood Component Utilization and Administration

Transfusion Preparation

Prior to obtaining blood/blood component:

- Check size and patency of IV catheter
- Complete Blood Product Release Form
- Check to see if blood component is ready
- Take the patient's vital signs within 30 minutes of the start time (pre-infusion vitals)
- Infuse only normal saline with blood component (no medication or other IV fluid)



Blood/Blood Component Utilization and Administration

How To Know Blood Component is Ready For Acute Care Patients

Look under lab tab in flowsheet view

- Allocated means blood component is ready for transfusion
- Issued signifies blood component was released to floor
- Released means unit is no longer allocated to patient

Navigator	Laboratory	4/4/2010 14:44 EDT	4/4/2010 12:13 EDT	4/4/2010 9:15 EDT	4/4/2010 8:30 EDT	4/4/2010 2:15 EDT
<input checked="" type="checkbox"/> CBC/Differential	Blood Bank Testing					
<input checked="" type="checkbox"/> Hematology Miscellaneous	ABO/Rh (D)					O POS
<input checked="" type="checkbox"/> Coagulation	Antibody Screen					NEG
<input checked="" type="checkbox"/> General Chemistry	<input type="checkbox"/> Units Ordered					(c) 5
<input checked="" type="checkbox"/> Special Chemistry	Blood Component Type					RED CELLS
<input checked="" type="checkbox"/> Blood Bank Testing	Crossmatch Expiration					04/07/2010
<input checked="" type="checkbox"/> Blood Bank Unit Information	Blood Bank Unit Information					
<input checked="" type="checkbox"/> Microbiology	BB Unit Number 1					*W04511015658
<input checked="" type="checkbox"/> POC Testing	Status of Unit 1					* (c) ISSUED
	BB Unit Number 2					*W04511014831
	Status of Unit 2					* (c) ISSUED,FIN.
	BB Unit Number 3					*W22701000793
	Status of Unit 3					* (c) ISSUED,FIN.
	BB Unit Number 4					*W22701000726
	Status of Unit 4					* ALLOCATED
	BB Unit Number 5					*W22701000726
	Status of Unit 5					* ALLOCATED



Blood/Blood Component Utilization and Administration

Picking Up Blood from Blood Bank

Procedures for picking up blood from the blood bank:

- Complete release form and send or deliver to blood bank
- Blood products may be picked up from the blood bank by any trained nursing personnel
- Transport only ONE blood component for ONE patient at a time (exception: blood dedicated cooler)
- Begin transfusion within 30 minutes of release from blood bank
- Complete blood release form each time blood component requested or picked up from blood bank
- Return blood component to lab immediately
 - Integrity or appearance is in question
 - Transfusion delayed
- DO NOT store blood components anywhere on unit

For Blood Bank Use Only:

Issue Date/ Time/ Tech: _____

MTP Request only	
_____ MTP pack	Consisting of: 6u PRBC 6u FFP 1 pack platelets
_____ Pedi MTP	(patients up to 6 Y.O.) Consisting of: 2u PRBC 2u FFP 1 pack platelets
Ordering Physician: _____	PRINT PHYSICIAN'S NAME
Date: _____	Time: _____
It is the ordering physician's clinical judgment that the patient is in urgent need of blood. A physician must document this on the patient's medical record	

Emergency Release Blood	
_____ Red Cells (LR)	_____ Plasma _____ Platelets _____ Cryoprecipitate
Ordering Physician: _____	PRINT PHYSICIAN'S NAME
Date: _____	Time: _____
It is the ordering physician's clinical judgment that the patient is in urgent need of blood. A physician must document this on the patient's medical record	

Routine request:	
_____ Red Cells (LR)	_____ Platelets _____ Cryoprecipitate
_____ Plasma	_____ RhIG _____ Other
Ordering Physician: _____	PRINT PHYSICIAN'S NAME
Transfusion Order: _____	Date: _____ Time: _____
<input type="checkbox"/> This request is to have blood available for surgery or other emergency use Blood received (date/time): _____ by _____ (O.R.#: _____)	
<i>To be filled out by R.N. (exception: surgery use or emergency transfusion):</i> _____ verify that: <input type="checkbox"/> The chart contains valid signed consent <input type="checkbox"/> The chart contains an order to transfuse the requested product and patient meets criteria in the transfuse order <input type="checkbox"/> Special blood product needs have been verified (e.g., irradiated, HbS- negative) <input type="checkbox"/> Any premedication orders have been administered <input type="checkbox"/> IV is patent <input type="checkbox"/> Vital signs recorded within 30 minutes of start of transfusion <input type="checkbox"/> Patient education of transfusion reaction S/S will be performed immediately prior to transfusion.	
R.N. _____	Date: _____ Time: _____ R.N. _____
Signature	RN (employee ID# or badge #)

Complete ALL information below (chart label may also be used)

Blood Bank _____ Patient Location (or tube station # if applicable) _____
 Armband #: _____
 Patient Name: _____

Medical Record #: 000 _____ Account #: _____
 Carolinas HealthCare System Patient Identifier

Blood Release Form

0215

THIS IS A PERMANENT PART OF THE MEDICAL RECORD

000



Blood/Blood Component Utilization and Administration

Infusion Rates per Policy

Administer blood according to suggested infusion rate below unless ordered by provider:

- Blood components must be infused within 4 hours of issue time
- Initial rate should be slower
- Recommended rate 1-2 mL/min of issue time for the first 15 minutes
- Monitor for a transfusion reaction, if no reaction, increase infusion rate

Suggested Infusion Rate of Components in Non-Emergency Settings*		
Component	Suggested Infusion Rate	
	Adult	Pediatric
Red Blood Cells	100-240 mL/hr	1-5 mL/kg/hr
Fresh Frozen Plasma	120-300 mL/hr	1-5 mL/kg/hr
Platelets	120-300 mL/hr	1-5 mL/kg/hr
Cryoprecipitated AHF	As rapidly as tolerated	As rapidly as tolerated
Granulocytes	60-150mL/hr	1-5 mL/kg/hr

*Transfusion must be completed in less than 4 hours of issue time
hr=hour; kg=kilograms; mL=milliter



Blood/Blood Component Utilization and Administration

Verification Procedure

- Review record for transfusion order, type of component and verify consent has been obtained
- Verify blood component matches order
- Perform positive identification utilizing scanning technology. When not utilizing a scanner, read aloud to second verifying clinician the following to compare blood tag and patient bracelet:
 - Patient name
 - MRN, blood bank ID#
 - Donor unit #
 - ABO
 - Rh
 - Crossmatch Result
 - Expiration Date
- Ensure blood tag stays on blood component until it has infused
- DO NOT ADMINISTER the blood if any discrepancy is noted
 - Call or Return the blood to the Blood Bank
- Follow procedure if utilizing a barcode scanner for positive patient identification



Blood/Blood Component Utilization and Administration

Patient Monitoring Should Occur at the Following Times

Pre-Transfusion

- Monitor vital signs within 30 minutes of transfusion start
- Notify provider if patient's temperature is greater than 100°F

During Transfusion

- Monitor 15 minutes after starting transfusion
- Monitor one hour from the start of the transfusion
- Monitor every hour

Post-Transfusion

- Monitor vital signs within 30–60 minutes



Blood/Blood Component Utilization and Administration

Monitoring: Transfusion Reaction



A patient has an increased risk for reaction in the first 10 to 30 minutes of transfusion

- RN/LPN must remain with patient for first 15 minutes after the start of infusion. This is to watch for any reaction.
- If a reaction happens, immediately stop the transfusion, notify the doctor and the Blood Bank
- Document reaction in the events/procedures/notifications in the EMR



Blood/Blood Component Utilization and Administration

Viewing Blood Transfusion Record

Vital Signs taken:

- Within 30 minutes prior to transfusion
- 15 minutes after starting transfusion
- 1 hour from start of transfusion
- Every hour
- End of transfusion
- 30 to 60 minutes after transfusion is stopped

Blood Transfusion Record View	4/6/2010 5:45 EDT	4/6/2010 5:15 EDT	4/6/2010 5:00 EDT	4/6/2010 4:00 EDT	4/6/2010 3:00 EDT	4/6/2010 2:25 EDT	4/6/2010 2:10 EDT	4/6/2010 1:10 EDT
Blood Product							Packed red blood	
<input type="checkbox"/> Amount to be infused	30 min after	END	hrs 3	hrs 2	1 hr	15 min	300.00 mL	Within 30
<input type="checkbox"/> Blood Unit Expiration Date							4/19/2010	
<input type="checkbox"/> Blood Unit Number							1	
<input type="checkbox"/> Blood Total Units Ordered							1	
Transfusion Start Time							4/6/2010 2:10	
1st unit of Current Blood Order							Yes	
Blood Transfusion Access Site							Peripheral IV Site	
Transfusion Stop Time		4/6/2010 5:15						
Transfusion Completed		Yes						
Transfusion Reaction		No						
Vital Signs								
<input type="checkbox"/> Temperature Oral (F)	98.2 DegF	98.8 DegF	98.2 DegF	98.2 DegF	98.0 DegF	98.0 DegF		98.2 DegF
<input type="checkbox"/> Peripheral Pulse Rate	70 BPM	72 BPM	70 BPM	68 BPM	66 BPM	68 BPM		68 BPM
<input type="checkbox"/> Respiratory Rate	20 breaths/minute	18 breaths/minute	20 breaths/minute	20 breaths/minute	20 breaths/minute	18 breaths/minute		16 breaths/m
<input type="checkbox"/> Systolic Blood Pressure	120 mmHg	128 mmHg	126 mmHg	120 mmHg	118 mmHg	120 mmHg		102 mmHg
<input type="checkbox"/> Diastolic Blood Pressure	72 mmHg	72 mmHg	70 mmHg	62 mmHg	68 mmHg	62 mmHg		66 mmHg
Oxygen Therapy								
<input type="checkbox"/> Oxygen Saturation	Room air	Room air				Room air		Room air
	99 %	98 %				98 %		98 %



Blood/Blood Component Utilization and Administration

Transfusion Reaction Signs/Symptoms

Signs and Symptoms of Transfusion Reaction				
Chills	Fever	Flushing	Headache	Chest Pain
Shortness of Breath	Back Pain	Nausea	Vomiting	Diarrhea
Bleeding	Pain at Site	Tingling	Skin Irritation	Itching



Blood/Blood Component Utilization and Administration

Monitor Vital Signs for Changes

Monitor Vital Signs for Following Changes	
BP	Systolic or Diastolic increase or decrease of greater than 30mmHg from baseline*
Temp	Equal to or greater than 1.8°F above baseline* (up to 1 hour after transfusion ends)
HR	Equal to or greater than 40 beats per minute over baseline*
O ₂	If indicated, oxygen saturation less than 90%
* Baseline is the vital signs taken within 30 minutes prior to start of transfusion	



Blood/Blood Component Utilization and Administration

Types of Transfusion Reactions

Allergic

Mild reaction:

- Skin changes such as wheals (sudden swelling or popping up)
- Urticaria (raised rash)
- Macular or maculopapular erythema (flat rash)

Moderate reaction:

- Breathing changes such as wheezing, especially on breathing out
- Laryngeal edema (fluids on the throat)

Severe reaction:

- Anaphylactic/signs of shock (life threatening allergic reaction)

Febrile, Non-Hemolytic

- Temperature elevation greater than or equal to 1.8°F or greater than or equal to 1.0°C during the transfusion (up to 1 hour post transfusion)
- Headache
- Flushing
- Anxiety
- Vomiting
- Muscle pain

Hemolytic

Acute:

- Back pain, tightness in chest, pain and/or burning at site of infusion, chills, rigors, hypotension, flushing and tachycardia

Delayed:

- Patient may develop symptoms from 24 hours to 21 days post transfusion that would include milder symptoms of acute hemolytic reactions such as chills, rigors, back/flank pain, hypotension and jaundice



Blood/Blood Component Utilization and Administration

More Types of Transfusion Reactions

TACO

Transfusion Associated Circulatory Overload

- Pulmonary congestion
- Moderate to severe respiratory distress
- Hypertension
- Tachycardia

TRALI

Transfusion-Related Acute Lung Injury

- Acute onset of Acute Lung Injury within 6 hours of infusion
- Hypoxemia
- Oxygen saturation less than 90% on room air
- Respiratory distress
- Life-threatening transfusion reaction

- Severe chills
- High fever
- Dry flushing
- Nausea
- Vomiting
- Hemoglobinemia
- Bleeding
- Sudden severe hypotension



Blood/Blood Component Utilization and Administration

Reaction to a Blood/Blood Component Transfusion

If you suspect a reaction to a blood/blood component transfusion:

- Stop Blood Product immediately
- Maintain patency of IV line
- Notify Physician/Blood Bank and document actions taken
- Compare patient and blood bank identification for discrepancies
- Complete and return *“Investigation of Suspected Blood Transfusion Reaction”* form along with donor bag and IV tubing to blood bank



Blood/Blood Component Utilization and Administration

Document Transfusion Reactions

<p>Transfusion Stop Time</p> <p>xxx / xx / xxxxx</p>	<p>Transfusion Completed?</p> <p><input type="radio"/> Yes <input type="radio"/> No</p>	<p>Reason Transfusion Not Completed</p> <p><input type="checkbox"/> IV infiltration <input type="checkbox"/> Other: <input type="checkbox"/> Possible transfusion reaction <input type="checkbox"/> Time limit reached</p>																											
<p>Signs of Transfusion Reaction Noted</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>																													
<p>Signs of Transfusion Reaction</p> <table border="0"> <tr> <td><input type="checkbox"/> Diarrhea</td> <td><input type="checkbox"/> Hemoglobinuria</td> <td><input type="checkbox"/> Shock</td> </tr> <tr> <td><input type="checkbox"/> Vomiting</td> <td><input type="checkbox"/> Hypotension</td> <td><input type="checkbox"/> Other:</td> </tr> <tr> <td><input type="checkbox"/> Nausea</td> <td><input type="checkbox"/> Chest pain</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Bleeding</td> <td><input type="checkbox"/> Headache</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Itching</td> <td><input type="checkbox"/> Urticaria</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Back Pain</td> <td><input type="checkbox"/> Asthma symptoms</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Chills</td> <td><input type="checkbox"/> Non-productive cough</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Dyspnea</td> <td><input type="checkbox"/> Pulmonary edema</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Fever</td> <td><input type="checkbox"/> Renal failure</td> <td></td> </tr> </table>		<input type="checkbox"/> Diarrhea	<input type="checkbox"/> Hemoglobinuria	<input type="checkbox"/> Shock	<input type="checkbox"/> Vomiting	<input type="checkbox"/> Hypotension	<input type="checkbox"/> Other:	<input type="checkbox"/> Nausea	<input type="checkbox"/> Chest pain		<input type="checkbox"/> Bleeding	<input type="checkbox"/> Headache		<input type="checkbox"/> Itching	<input type="checkbox"/> Urticaria		<input type="checkbox"/> Back Pain	<input type="checkbox"/> Asthma symptoms		<input type="checkbox"/> Chills	<input type="checkbox"/> Non-productive cough		<input type="checkbox"/> Dyspnea	<input type="checkbox"/> Pulmonary edema		<input type="checkbox"/> Fever	<input type="checkbox"/> Renal failure		<p>Transfusion Reaction Interventions</p> <p><input type="checkbox"/> Blood container returned to lab <input type="checkbox"/> Bag, tag, IV sets/fluids to Bld Bank <input type="checkbox"/> Direct Coombs ordered <input type="checkbox"/> EDTA Blood Sample obtained <input type="checkbox"/> IV maintained with normal saline <input type="checkbox"/> Physician notified <input type="checkbox"/> Rxn form sent to Bld Bank <input type="checkbox"/> Other:</p>
<input type="checkbox"/> Diarrhea	<input type="checkbox"/> Hemoglobinuria	<input type="checkbox"/> Shock																											
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<input type="checkbox"/> Fever	<input type="checkbox"/> Renal failure																												



Blood/Blood Component Utilization and Administration

Discharge Instructions

- Provide written instruction to outpatients and inpatients who will be discharged on the day of transfusion regarding signs and symptoms of blood transfusion reactions
- Provide name and telephone number of person to contact if patient experiences signs and symptoms of reactions
- Remind patient that delayed reactions can occur up to 21 days after a transfusion



Blood/Blood Component Utilization and Administration

Summary

Safe blood component administration depends on procedures and processes that allow for verification, patient monitoring and the knowledge of transfusion reactions.

The following are some strategies reviewed in this course:

- Define safe blood/blood component administration procedures based on policy
- Outline the process for verification of the right blood product for the right patient
- Discuss requirements for patient monitoring including frequency and documentation
- Identify transfusion reactions
- Describe treatment for transfusion reactions

