I. POLICY:

The following sections state the policy and procedure for blood component transfusion:
A. General Blood Product Transfusion
B. Obtaining a Specimen for Type and Screen
C. Before Obtaining Blood from the Blood Bank
D. Obtaining Blood Products from the Blood Bank
E. Obtaining Blood Products Through the Pneumatic Tube System
F. Manual or Cooler Pick-Up of Blood Products
G. Procedure for Blood Administration (non-ICU)
H. Neonatal Intensive Care Procedure for Blood Administration
I. Emergency Issuance of Uncross-matched Blood
J. Adverse Reaction

II. PURPOSE:

To provide blood product transfusion to patients, per licensed independent practitioners order, in accordance with the New Jersey State Department of Health, College of American Pathologists, FDA and American Association of Blood Banks (AABB) guidelines.

III. PROCEDURE:

A. GENERAL BLOOD PRODUCT TRANSFUSION:

1. All blood bank specimens require a collector and a witness to collect and verify patient information on the ID band with the tube label and request sheet at the bedside. A collector or a witness can be an SPUH employee from the following departments or types of employees: RN, physician, APN, PA, Phlebotomy, Lab Tech, outpatient PAT tech., nursing contracted services or agency nurse. Transfusionist is the primary RN or physician initiating the blood transfusion.
2. All Blood Bank samples are collected after the patient has been properly identified using three unique identifiers (full name, FIN#, and date of birth). The identifiers are checked with the patient ID band, request sheet, and sample labels. The birth date may not be available during emergencies and does not appear on the ID band of neonates or Laboratory generated sample labels.

3. If the band is removed from an inpatient who has a current blood bank sample, it must be replaced and verified per protocol. If an ID band is removed from a PAT patient, the patient must be re-banded upon admission and the sample recollected and tested.

4. All blood specimens for type and screen will require a second sample if no prior type is noted in the patient’s blood record. (Exception: patients that type as Group “O”). If a prior sample cannot be obtained, the patient will receive Group O crossmatch compatible red blood cells.

5. The Administration of any blood/blood components (red blood cells, platelets, fresh frozen plasma, cryoprecipitate or granulocytes) must be performed by a physician (Allopathic, Osteopathic, Dentist) or an RN.

6. A specific order must be obtained from the practitioner (physician, APN, or PA) prior to the transfusion of blood products. The order must be placed on the appropriate Blood Component Order Form (adult, pediatric, or neonatal) or completed in the Clinical Information System.

7. The patient consent must be obtained prior to the transfusion. The blood consent is valid for the entire hospital admission. The blood consent is valid for 30 days in the Infusion Room and Pediatric Hematology Oncology Departments provided the FIN number does not change. The consent is obtained by a physician, resident physician, PA, or APN. The risks, benefits and alternative options to transfusion are explained to the patient at the time of consent.


9. Blood may be issued from the Blood Bank and stored in coolers for patients in the OR and Labor Rooms for up to 6 hours from the time of issuance from the Blood Bank.

10. All blood transfusions must be started within 30 minutes of issuance from the Blood Bank. If not transfused, blood products must be returned to the Blood Bank within 30 minutes of issue.

   Exceptions: “O” negative uncross-matched red blood cells stored in the Labor Room blood bank refrigerator or red blood cells stored in coolers in OR or Labor Room.

11. Blood must never be piggybacked with other fluids. If the patient has a central line, blood may run through one port and other fluids/meds through another. Lumen size must be considered when using a PICC (3 French or greater is recommended) to transfuse blood or blood products.

12. Additives must never be placed in blood bag/blood products. Medications should never be administered simultaneously with blood/blood products via the same IV line including Ringers Lactate.

13. The appropriate blood filter tubing must be used when transfusing any blood products. The filter/tubing must be changed with each unit transfused. Because of the large number of filters available, the instructions for use on the package or in the product insert must be read to determine priming instructions.

14. Only normal saline should be used to flush or troubleshoot the catheter prior to, during and immediately after the transfusion.
15. The rate of administration of blood/blood products must not exceed four (4) hours from the time the blood product is issued from the Blood Bank (see issue time on transfusion record).

16. The transfusion rate is controlled by an infusion pump or roller clamp.

17. Personnel who participate in the administration of blood components are trained in transfusion procedures and in the recognition and management of adverse reactions during orientation and annually.

18. Blood units cannot be transported with the patient unless the blood is infusing. An RN must accompany the patient whenever he/she is being transported with a blood transfusion in progress.

19. Verification must be done by two (2) individuals at the bedside immediately prior to the transfusion. Both individuals must be either an RN, APN, physician or PA. One of the individuals conducting the identification verification must be the qualified transfusionist who will administer the blood or blood product to the patient. Verification must be done at the bedside immediately prior to beginning the transfusion by checking the ID band, blood unit, unit tag, and transfusion record form. Once the blood unit has been verified, it cannot be removed from the bedside. If the blood product is removed, it must be re-verified by two verifiers.

20. Monitoring of vital signs must be completed within one (1) hour of issuance from blood bank (prior to beginning the transfusion), after the first fifteen (15) minutes, and at the completion of the transfusion.

21. The oncoming nurse must check the blood unit for patient identification when the transfusion occurs between shifts.

22. MRI cannot be performed during a blood transfusion.

23. Devices such as blood warmers and infusion pumps are tested for appropriate function and safety as per BioMed preventive maintenance schedule. Equipment that does not have a current Bio-Med sticker must not be used.

24. Miscellaneous Devices
   a. Cuffs: for pressure infusion may be used if care is taken not to exceed the designated pressure (greater than 300 mm/Hg). Pressure cuffs should not be used with leukoreduction filters or with many semi-permanent indwelling venous catheters. Use of a pressure device with a PICC may cause catheter wall rupture. Follow the specific filter, port or catheter manufacturer’s instructions regarding use of these pressure devices.
   b. Blood Warmers: Practitioners’ order required. Only devices specifically designed for blood warming must be used. Use as per manufacturers instructions.
   c. Cell Saver: See policy: (Perioperative Autologous Transfusion 8.6, MSD-2.30)

B. OBTAINING A SPECIMEN FOR TYPE & SCREEN:

The RN will:
1. Verify practitioners order for type and screen with or without red cells.

The RN/NUS will:
1. Prepare a blood bank request sheet.
2. If the sample is being collected by the Lab, hold the request sheet at the nursing station for subsequent pickup by phlebotomy staff.
The Collector will:
1. Obtain a witness prior to drawing blood. Witness must remain at the bedside during patient identification/verification, sample collection, sample labeling and documentation.
2. Obtain correct labels, proper tubes and blood bank request sheet. A 7 ml lavender tube is required. For pediatric patients, a full 3 ml lavender tube can be used. For neonates (<4 months old) two full lavender microtainers should be collected.

The Collector and Witness will:
1. Identify the patient.
   a. Ask the patient to spell his/her first and last name and state birth-date, if able. Check with request sheet and ID band. This step may not be possible if patient is incoherent, a small child or baby, or in emergency situations.
   b. Check patient name, FIN number and birth-date on ID bracelet with label and request sheet. (Lab labels do not contain birth date).
   c. Perform hand hygiene and put on gloves.

The Collector will:
   a. Collect blood specimen. Immediately apply preprinted label to the specimen at bedside. Label must contain the patient full name (last, first) and FIN#. Never leave the patient’s side with an unlabeled sample.

The Collector and Witness will:
   a. Initial tube label and sign request at bedside.
   b. Date and time label on tube and Blood Bank request sheet (B-9) at the bedside.
   c. Check the patient's name and FIN number on the labeled tube with the hospital ID band before leaving the patient.
   d. PAT and Outpatients for OR and/or transfusion must remind the patient that the hospital band must remain on for up to 72 hours prior to admission and until discharge.

The RN/NUS will:
1. For Change in Patient's Status:
   a. If the patient's condition deteriorates and the type and screen has been upgraded to STAT: the nursing staff must inform blood bank by calling Ext #8225.
   b. Place a STAT order in the electronic medical record for “Change cross match priority to STAT.” This order can be found in the search menu. Type the word “change”.

The Blood Bank Tech will:
1. If there is a delay in the availability of a blood product (inpatient, ED, Infusion Room):
   a. Notify the nurse.
   b. Document in Blood Bank computer

The RN will:
   a. Read back the critical notification
   b. Call and notify the practitioner of the blood delays and follow critical lab notification protocol
The Blood Bank Tech will:
1. Evaluate all type and screen samples for prior blood group history. Perform current type. If patient has no prior history and is not blood group “O” a second sample blood group and type will be collected and tested. If a red cell transfusion is needed, prior to testing the second sample, group “O” red cells will be issued for transfusion.

C. BEFORE OBTAINING BLOOD FROM THE BLOOD BANK

The RN will:
1. Verify practitioner’s orders.
2. Explain procedure to patient/parent/significant other and reinforce possible adverse reactions. (Not applicable, in OR). Give patient/family the education pamphlet entitled “Important Facts About Blood Transfusion” as appropriate.

The Physician/APN/PA will:
1. Obtain patient/parental consent (as per policy), prior to the receipt of blood from Blood Bank. Explain blood transfusion risks, benefits, and alternatives to transfusion for all inpatients, same day stay transfusions and at the time of surgical consent for all elective cases. The anesthetist and/or surgeon is responsible for emergent cases. The RN may serve as the witness to the consent.

The RN/Physician will:
1. Check the Hospital Computer system or call Blood Bank to verify blood availability.

The RN will:
1. Verify completed consent.
2. Take baseline temperature/pulse/respirations/blood pressure. The temperature must be taken within one hour prior to transfusion.

The RN/Physician/APN will:
1. Assure patency of a large bore (i.e. #18 or 20 gauge) IV line, (or prepare venipuncture site and follow procedure for starting an IV if the patient does not already have one). For pediatric patients, 24 to 22-gauge catheter may be used.
2. Administer any pre-transfusion medication as ordered by the physician

D. OBTAINING BLOOD AND BLOOD PRODUCTS FROM THE BLOOD BANK

1. Blood and blood products may be picked up directly from the Blood Bank, received through the pneumatic tube system, or issued and stored in a cooler in the OR and LDR, perioperative area.
2. Use the pneumatic tube system when blood products are needed urgently.
3. Except in emergency situations or when the patient has more than one line for transfusion, blood products are issued one unit at a time.
4. Blood may only be obtained for one patient at a time. Blood may not be requested through the pneumatic tube for two different patients at the same time on the same nursing unit.
5. Blood/blood products cannot be issued to volunteers. The person authorized to receive blood or blood products must be a trained employee (nurse, unit secretary, OR aide, patient care tech).
6. Blood products are issued through the pneumatic tube to the nursing units that have trained.

7. Blood products must be removed from the pneumatic tube immediately. If the time between issuance from Blood Bank and release from the pneumatic tube exceeds 20 minutes, the blood must be returned to Blood Bank.

8. Unused blood products (except for blood stored in the cooler), must be returned to the Blood Bank within 30 minutes of the issue time (see time on transfusion-pink slip).

9. Only whole blood or red blood cell products may be stored in a cooler. The maximum time for storage is 6 hours.

E. OBTAINING BLOOD AND BLOOD PRODUCTS THROUGH THE PNEUMATIC TUBE SYSTEM

The RN/NUS will:
1. Call the Blood Bank (x 8225) to request blood transported through the pneumatic tube system.

2. Complete one Blood Bank Request Sheet (B-9) (B-14 for ED) and send to Blood Bank through the pneumatic tube system (station 40 or 50). The Blood Component Order form (QA-1) may also be sent at this time unless an electronic order for transfusion was entered in the system by the physician, APN or PA. The Request Sheet must be received within 30 minutes of the call.

3. Annunciator will ring (except in Labor Room) when the blood product arrives. All Labor Room blood products are sent non secure because the pneumatic tube system is in a secure area.

The RN/NUS/NA/PCT/Physician will:
1. Immediately remove the unit from the pneumatic tube.
   a. Enter the secure code (last three digits of patient FIN #).
   b. Do not leave the tube station. Follow the instructions on the blood issuance label.
   c. Sign the transfusion record in the space marked “received by”.
   d. Complete all information required on the label from the transfusion record form.
   e. Check and compare the patient/unit information on the label sheet, blood unit label, unit tag and transfusion record form.
   f. Return the completed label to the Blood Bank immediately (station 40 or 50) and bring the blood component, transfusion record form, and filter tubing to the nurse.

F. MANUAL OR COOLER PICKUP OF BLOOD PRODUCTS

The RN/NUS/NA/PCT/Physician will:
1. Bring a completed Blood Bank request sheet (B-9) to the Blood Bank. It cannot be sent through the pneumatic tube system. The Blood Component Order sheet (QA-1) must be sent or brought to the Blood Bank prior to or at the time of the issuance of blood or blood components unless the physician electronic order for blood transfusion was entered.
The Blood Bank Tech with RN/NUS/NA/PCT/MBT/Physician will:
1. Check all donor and patient information on the blood product label, request sheets, transfusion record form and the Blood Bank computer system. Check product expiration date and visual inspection of blood product. If there are no clerical discrepancies or visual abnormalities, both the receiver and Blood Bank technologist sign, date and time the blood issuance book and transfusion (pink) slip.

The RN/NUS/NA/PCT/Physician will:

The Blood Bank Technologist will:
1. Cooler Blood Issuance: Irreversible temperature indicators are activated and applied to each red cell product. Blood is packed with a bag of wet ice placed above the red cell/whole blood product(s) and in contact with every unit in the cooler. Transfusion record forms are placed in the cooler above ice. The patient name, FIN Number and birth date are recorded on one side of a blank white card and just the FIN number is recorded on the other side.

The Blood Bank Tech with RN/NUS/NA/PCT/MBT/Physician will:
1. Read the name, FIN Number and date of birth from one side of the card and the FIN Number from the other side while the Blood Bank technologist checks the information with Blood Bank records. Card is placed in plastic sleeve on cooler with only the FIN Number showing.

The RN/NUS/NA/PCT/Physician will:
1. Transports cooler to OR/LDR
2. Check with the NUS or charge nurse to confirm LDR/surgical suite room#. Bring cooler into the requested LDR/surgical suite. Communicate and confirm with the circulating nurse that the requested blood product(s) are for the correct patient. Give cooler to the circulating nurse

The OR Nurse/Physician will:
1. Two people simultaneously check each blood product unit as described below under “Procedure For Blood Product Administration”. Ensure that blood products remain in the cooler below the ice bag. The units which expire first should be transfused first. When the cooler contains more than one type of blood product (ex: homologous, directed, autologous), the units must be transfused in the following order regardless of expiration date:
   a. autologous
   b. designated/directed
   c. homologous

The Circulating Nurse will:
1. Arrange and ensure that unused blood product(s) in the cooler and transfusion record forms are returned to the Blood Bank within six (6) hours of issuance from the Blood Bank (check time on transfusion record).
2. Arrange and ensure that empty blood cooler(s) is/are returned to the Blood Bank by the Nursing Assistant or designee.
3. Return the completed Blood Bank copy (yellow) of the Transfusion Record form to the Blood Bank.
G. PROCEDURE FOR BLOOD ADMINISTRATION (NON-NICU)

EQUIPMENT:

Unit of Blood Product (volume noted on bag label or on attached unit tag)
Blood Filter with tubing
IV Pole
IV access
Infusion pump.

The RN/Physician will:
1. Match the blood component to the order.
2. Prepare equipment.
3. Verification must be done by two individuals at the bedside immediately prior to the transfusion. One of the individuals verifying must be an RN. The other may be another RN or a physician. One individual performing the identification verification must be the qualified transfusionist who will administer the blood or blood component to the patient. Complete the appropriate sections of the transfusion record.

NOTE: When performing the patient/blood unit verification, do not stop or interrupt the process at any point. If interrupted start the process again.
4. Check must include the following:
   a. Ask patient to state full name and birth date (if able). Check blood unit tag.
   b. Check patient name, date of birth, and FIN number on ID band with that on the transfusion record and blood unit tag. Both verifiers must physically check the ID band, blood unit, unit tag, and transfusion record form.
   c. Check donor ABO Rh type and blood unit number on the transfusion record and unit tag with blood unit label.
   d. Check patient ABO Rh type on transfusion record with blood unit tag. If applicable, check for any additional attributes such as direct donor, CMV negative, irradiated, or leukocyte reduced blood.
   e. Verify that the information is identical. If there is a discrepancy, call blood bank.
   f. Verify expiration date on blood unit and verify compatibility on unit tag and transfusion record.
   g. If the patient type is different from the donor type, confirm ABO compatibility by calling the Blood Bank.
   h. Unit tag must remain attached to the unit of blood at all times.
5. Inspect component for unusual appearance or evidence evidence of leakage. If any, notify blood bank immediately.
6. Instruct patient to report any chills, rash, itching, headache, dizziness, fever or other symptoms, which may indicate a blood transfusion reaction immediately to the RN. In the OR, observe for rash or change in vital signs which may indicate a transfusion reaction in the anesthetized patient.
7. Perform hand hygiene and put on gloves. Assemble equipment.
8. Prior to blood transfusion, completely flush incompatible intravenous fluid and/or drugs from the administration set with 0.9% normal saline.
9. Start the blood product transfusion IMMEDIATELY after verifying the blood product and patient at the bedside. If you must leave the patient bedside or remove the blood product from the bedside prior to transfusion, REPEAT ACTIONS #2 and 3.
10. **Hang blood as instructed by Blood Filter procedure.**

**NOTE:** Do not spike blood bag until verification process is complete and accurate.

a. Use aseptic technique.
b. Remove protectors on blood bag and tubing.
c. Close regulating clamp and insert spike into blood or solution container. Use caution to avoid puncturing blood container.
d. Invert container and filter. Open regulating clamps and squeeze container gently until filter is saturated and drip chamber is ½ full. Close regulating clamp and suspend container.
e. Open regulating clamp to prime remainder of set. Purge air. Close clamp until roller meets bottom of frame.
f. If using infusion pump, load blood bag on pump per manufacturer’s instructions and input rate

The RN will:

1. Assess patient for signs and symptoms of adverse reaction by monitoring vital signs at the beginning of the transfusion, after the first fifteen minutes, and at the completion of the transfusion.
2. If there is a change in the primary nurse, the nurse that is assuming care must check the unit of blood for proper patient identification.
3. After blood is completely transfused and no reaction noted, flush line with normal saline until the tubing is clear.
4. Complete all documentation on the transfusion record.
5. Observe all patients for one (1) hour post transfusion and monitor for signs and symptoms of a reaction. Patient’s may be discharged sooner upon the discretion of the Practitioner. Outpatients post transfusion must be provided with the information sheet, “After the Blood Transfusion Procedure.” Instruct inpatients to report any symptoms to the staff immediately or to the attending MD after discharge. Patients with altered level of consciousness (LOC), renal or cardiovascular problems may need increased observation.
6. Cover the end of the tubing with a cap. Return the blood bag and tubing to the lab in the appropriate container.
7. See below for Adverse Reaction procedure.
8. Document volume of blood infused on the transfusion record and in the electronic medical record.
9. Return the blood bag and tubing/syringe to the lab in the appropriate container

**H. NEONATAL INTENSIVE CARE PROCEDURE FOR BLOOD ADMINISTRATION**

**EQUIPMENT:**
- Unit of Blood/Blood Product.
- Blood Filter/syringe pre-labeled with patient information.
- Tubing.
- IV Pole.
- IV access
- 0.9% Normal Saline Flush.
- 3-way stopcock.
- Infusion pump (pediatric only) and tubing compatible with pump
PROCEDURE FOR HANGING BLOOD PRODUCT:

The RN will:
1. Verify MD/APN orders.

The Anesthesia/Physician/NPN/PA will:
1. Calculate the desired amount of blood needed by using the blood component replacement formula as follows:
   A. Approximate (estimated) blood volume:
      Age: Total Blood Volume:
      Premature infants 90-105 ml/kg
      Term newborns 78-86 ml/kg
      Formula: \(45 - \text{patient Hct} \times \frac{\text{blood volume} \times \text{weight}}{60}\)
      If infant is less than 1,000 grams: all red cells, platelets and granulocytes should be ordered as irradiated.
2. Verify parental consent.

The RN will:
1. Take baseline temperature/pulse/respirations/BP (TPR) within one hour of the transfusion in non-emergent cases
2. Assure patency of IV line, (or prepare venipuncture site and follow procedure for starting an IV if the patient does not already have one), prior to obtaining blood/blood products from the blood bank.
3. Follow procedure for obtaining blood/blood products from the blood bank. (see above).
4. Prepare equipment.
5. Match the blood or blood component with the orders.
6. Verification must be done by two individuals, at the bedside, immediately prior to the transfusion. One of the individuals verifying must be an RN. The other may be an RN, physician, or anesthetist. One individual conducting the identification verification must be the transfusionist who will administer the blood or blood component to the patient. Complete the appropriate sections of the documentation.
10. Check must include the following:
   a. Verify patient’s name on blood unit tag.
   b. Check patient name, FIN # and date of birth on ID band with the blood unit tag and Transfusion Record form. Both verifiers must physically check the ID band, blood unit tag and transfusion record form.
   c. Check donor ABO Rh type and blood unit number on the transfusion record and unit tag with that on blood label.
   d. Check patient ABO Rh type on transfusion record with that on blood unit tag. If applicable, check for any additional attributes (i.e. direct donor, CMV negative, irradiated, leukocyte reduced, etc).
   e. Verify expiration date on bag and syringe.
   f. If patient type is different from donor type, call the Blood Bank before proceeding for confirmation of compatibility. If donor group is O, it is not necessary to call Blood Bank.

**NOTE:** If any discrepancies, notify blood bank immediately.

11. Inspect component for unusual appearance or evidence of leakage.
12. Wash hands and put on gloves. Assemble equipment.
13. Prior to blood transfusion, completely flush incompatible intravenous solutions and drug from heparin lock.
14. Attach filter to blood bag and then allow blood to fill filter.
15. Aspirate desired blood volume into syringe and flush IV tubing.
16. Insert syringe into pump and set the pump with the total volume to be infused and the desired/ordered rate and begin infusion by pressing “start.”
17. Assess patient for signs and symptoms of adverse reaction by monitoring vital signs at the beginning of the transfusion after the first fifteen minutes and at completion. *Document vital signs on the transfusion record noting signs and symptoms of reaction and signature of the nurse.
18. After blood is completely transfused and no reaction noted, flush line with normal saline.
19. Complete all documentation on the transfusion record.
20. Document volume of blood infused on the Transfusion Record and on I&O Form in the electronic medical record.
21. Observe patient for one hour after transfusion for signs and symptoms of a possible transfusion reaction (change in vital signs or rash may indicate a transfusion reaction in the anesthetized patient). See “Adverse Reaction” below. 
NOTE: Delayed reactions can occur days or weeks after the transfusion.
22. Return the blood bag and tubing/syringe to the lab in the appropriate container.

I. EMERGENCY ISSUANCE OF UNCROSS-MATCHED BLOOD

In an emergency, (e.g., massive hemorrhage in the ED or an anesthetized patient in the OR where hemorrhage is unexpected, etc) alternatives to blood such as volume expanders are recommended until the standard compatibility testing can be completed by the blood bank personnel. If the clinical scenario does not allow for waiting for such testing, documentation of the emergency transfusion due to a life threatening condition must be entered in the progress notes by the practitioner. Call blood bank for the emergency release of uncross- matched blood. The practitioner must sign the Emergency Release form provided by the Blood Bank.
1. The Release of Uncross-matched Blood form is sent to the physician with the blood products to avoid time delays during a critical emergency. Group O packed red blood cells are issued when there is not time to perform a blood type. Type specific red blood cells will not be released until there have been two types performed on two different samples (one from current sample and one from history is acceptable) or if the patient is Group O.
2. Two units of Group O Rh Negative red blood cells are stored in a monitored Blood Bank refrigerator in the Labor Room for emergency use only. All required paperwork and instructions for “Emergency Release of Uncross-matched Blood” are with the blood. Labor Room or NICU staff must call the Blood Bank as soon as possible upon removal of the units from the refrigerator.

J. ADVERSE REACTION

The RN/Physician will:
1. Assess the patient for fever equal to or greater than 2º F above baseline, headache, hypotension, respiratory distress, dyspnea, basilar rales, flushing, wheezing, anxiety, urticaria, itching, chills, tachypnea nausea, vomiting, chest pain, burning at IV site, backache, tachycardia, hematuria or any other signs/symptoms indicative of a transfusion reaction. The RN/physician will assess the patient throughout the transfusion for signs/symptoms of a reaction.
Hypotension definitions:
Adult (18 years and older):
Unexpected drop in systolic blood pressure of greater than or equal to 30 mmHg. If expected, document reason on Transfusion Record form – Comment section. If unexpected, initiate suspected reaction protocol.
Infants, Children, or Adolescents (1 to 17 years):
Greater than 25% drop in systolic blood pressure (e.g. drop in baseline systolic blood pressure from 120mmHg to below 90mmHg.).
Neonates/Infants (less than 1 year of age OR any age and less than 12 kg body weight): Greater than 25% drop in baseline values (systolic or diastolic).

NOTE: Fever and chills are the most common initial symptoms of an acute hemolytic transfusion reaction.

2. Incompatibility reactions usually exhibit themselves during the first (30) thirty minutes. Adverse reactions may occur any time during or after transfusion, usually up to (6) six hours post-transfusion, but may occur days or even weeks afterwards.

3. Upon detection of signs and/or symptoms presumptive of transfusion reaction, immediately stop the transfusion. Start an infusion of 0.9% Normal Saline to keep vein open.

4. Immediately check and record vital signs, TPR, and BP.

5. Check the bags, labels and other paperwork to confirm the patient's identity and ABO compatibility. Compare the transfusion record, blood unit label, blood unit tag and patient ID band to confirm patient identity and ABO compatibility.

6. Immediately notify, in this order:
   Blood Bank X 8225
   House MD, resident, PA or APN
   Attending physician.
   Refer to the chain of command policy if any delays. If the transfusion is to be continued (as per the physician/licensed practitioner and laboratory pathologist) an order is needed to continue the transfusion.

The RN will:

1. Inform the patient/parent/significant other that he/she may be having an adverse reaction and provide reassurance of treatment for the reaction.
2. Monitor patient for signs and/or symptoms of shock every (15) fifteen minutes until stable.
4. Obtain necessary specimens as requested by Blood Bank.
5. Send blood bag and administration set to Blood Bank in the approved container.
6. No additional blood/blood products shall be dispensed prior to completion of a suspected reaction, unless approved by the pathologist on duty/on call.

IV. DOCUMENTATION:

The RN will:

1. Transfusion Record: Complete all sections. Send one copy to blood bank and place one with the medical record.
2. Baseline vital signs, 1st 15 minute vital signs, and vital signs upon completion must be documented on the Transfusion Record form. Follow downtime protocol when necessary.
The Physician will:
1. Blood Component Order Sheet or electronic physician order entry of blood transfusion order.
2. Report of immediate blood transfusion reaction form (L-67)
3. Anesthesia Record. (if appropriate)

V. REFERENCES:


Approved by:

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<tr>
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