COHESIVE HEALTHCARE MANAGEMENT & CONSULTING

MANGUM REGIONAL MEDICAL CENTER

TITLE		POLICY
Blood Product Administration		**NUR-006**
MANUAL	EFFECTIVE DATE	REVIEW DATE
Nursing	**02/2020**	
DEPARTMENT	REFERENCE	
Nursing	See below	

SCOPE

This policy applies to Mangum Regional Medical Center, Registered and Licensed Practical Nurses who are involved in the administration of blood products.

PURPOSE

To set guidelines and to define the responsibilities of nursing personnel for the proper administration and monitoring of blood products

DEFINITIONS

See under Types of Transfusion Reactions

POLICY

Blood products should be initiated only by a Registered Nurse who has demonstrated competency in blood product administration. Blood products can be monitored by a LPN under the supervision of a RN. "Supervision" means the RN is on the premises and immediately available.

1. Administration of blood products must be meticulously monitored. Serious and fatal transfusion reactions have occurred from clerical errors in identification of the correct patient and/or products to be transfused. No amount of checking is excessive when administering blood products.
2. Blood specimens are viable for cross-matching for seventy-two (72) hours after collection.
3. A Blood ID band is placed on the patient when blood is collected for Type and Screen.
4. The Blood ID numbers on units being transfused must match the armband before the blood product is given.
5. If the Blood ID band becomes detached from the patient's arm or leg, a new sample is collected with a new Blood Bank armband.
6. Following transfusion, the blood transfusion form is attached to the patient's medical record. **Do not remove** the tag from the unit of blood until the transfusion is complete.
7. Standard precautions are adhered to by the nurse during this procedure.

8. The hospital consent for blood transfusion must be obtained, completed, witnessed and signed by the patient or patient representative and one consent is sufficient per hospital stay.
9. A consent for Blood Transfusion is not required if the physician orders the blood transfusion for life-threatening situations (e.g., trauma).

PROCEDURE

1. For the administration and monitoring of all blood products, refer to the Hospital's Professional Resource Guide.
2. **Requesting Blood Components:**
    a) The physician enters an order into the patient's chart for Type and Screen and/or blood products.
    b) **EXCEPTIONS:** In case of emergency, type O negative blood may be given, and the physician/provider must sign the permit within twenty-four (24) hours.

3. **Notification of Unit Availability:** Once blood product is received by the lab, lab personnel will notify the patient care area of the blood product availability.

4. **Blood Issuance**

a) Blood for one patient will be issued at a time. Units are packed in a cooler.
b) The physician order will be used for each issue of blood product until the order is completed.
c) The Blood Bank personnel will issue the blood product per department policy.
d) The blood product is taken directly and *immediately* to the patient's bedside.
e) Never store blood in an unmonitored refrigerator.
f) Blood must be started within thirty (30) minutes after receiving from Blood Bank.
    a. If the transfusion cannot be started, return he blood *immediately* within 30 minutes of issue to the Blood Bank. Delay in return will force the component to be discarded.
g) Each blood product will have a sticker identifying the unit to the patient. A copy of this sticker is placed on the Transfusion Record. The sticker remains attached to the blood product always. The blood product must always be positively identified to the recipient.

5. **Blood Verification**

a) Before beginning the transfusion, it is extremely important to correctly identify the patient and the blood product by qualified personnel by an RN and second verification by a RN or LPN.
b) Both nurses must indicate on the Transfusion Record that this verification process has been completed by signing the form (2 signatures are required).

6. **Monitoring during Infusion**

a) The nurse observes the patient closely. Vital signs are taken immediately prior to obtaining the blood, within fifteen (15) minutes after initiating the transfusion, every 15 minutes for the first hour then every 30 minutes during the remainder of the transfusion, and then *one* (*1) hour AFTER the transfusion had been discontinued.*
b) **Note:** If the blood is stopped for a transfusion reaction, the Transfusion Reaction form should be filled out and a copy sent to Quality Management and Blood Bank.

7. **Refusal to Permit Blood Transfusion**

a) The patient must sign the Refusal for Blood Transfusion.

b) Notify the House Supervisor or Charge Nurse, and the provider or physician.

REFERENCES

American Association of Blood Banks (AABB) Technical Manual, current edition
AABB Standards for Transfusion Services, current edition. CDC.gov
https://www.cdc.gov/bloodsafety/basics.html

ATTACHMENTS

NUR-006A Consent for Blood & Refusal of Transfusion
NUR-006B Transfusion Reaction Form
NUR-006C Blood Transfusion Administration Form

REVISIONS/UPDATES

Date	Brief Description of Revision/Change

Types of Transfusion Reactions

- **Allergic reaction**
  An allergic reaction results from an interaction of an allergen in the transfused blood with preformed antibodies in the person receiving the blood transfusion. In some instances, infusion of antibodies from the donor may be involved. The reaction may present only with irritation of the skin and/or mucous membranes but can also involve serious symptoms such as difficulty breathing.
- **Acute hemolytic transfusion reaction (AHTR)**
  An acute hemolytic transfusion reaction is the rapid destruction of red blood cells that occurs during, immediately after, or within 24 hours of a transfusion when a patient is given an incompatible blood type. The recipient's body immediately begins to destroy the donated red blood cells resulting in fever, pain, and sometimes severe complications such as kidney failure.
- **Delayed hemolytic transfusion reaction (DHTR)**
  A delayed hemolytic transfusion reaction occurs when the recipient develops antibodies to red blood cell antigen(s) between 24 hours and 28 days after a transfusion. Symptoms are usually milder than in acute hemolytic transfusion reactions and may even be absent. DHTR is diagnosed with laboratory testing.
- **Delayed serologic transfusion reaction (DSTR)**
  A delayed serologic transfusion reaction occurs when a recipient develops new antibodies against red blood cells between 24 hours and 28 days after a transfusion without clinical symptoms or laboratory evidence of hemolysis. Clinical symptoms are rarely associated with DSTR
- **Febrile non-hemolytic transfusion reaction (FNHTR)**
  Febrile non-hemolytic transfusion reactions are the most common reaction reported after a transfusion. FNHTR is characterized by fever and/or chills in the absence of hemolysis

(breakdown of red blood cells) occurring in the patient during or up to 4 hours after a transfusion. These reactions are generally mild and respond quickly to treatment. Fever can be a symptom of a more severe reaction with more serious causes and should be fully investigated.

- **Hypotensive transfusion reaction**
  A hypotensive transfusion reaction is a drop in systolic blood pressure occurring soon after a transfusion begins that responds quickly to cessation of the transfusion and supportive treatment. Hypotension also can be a symptom of a more severe reaction and should be fully investigated.
- **Post-transfusion purpura (PTP)**
  Post-transfusion purpura is a rare but potentially fatal condition that occurs when a transfusion recipient develops antibodies against platelets, resulting in rapid destruction of both transfused and the patient's own platelets and a severe decline in the platelet count. PTP usually occurs 5-12 days after a transfusion and is more common in women than in men.
- **Transfusion-associated circulatory overload (TACO)**
  Transfusion-associated circulatory overload occurs when the volume of blood or blood components are transfused cannot be effectively processed by the recipient. TACO can occur due to an excessively high infusion rate and/or volume or due to an underlying heart or kidney condition. Symptoms may include difficulty breathing, cough, and fluid in the lungs.
- **Transfusion-related acute lung injury (TRALI)**
  Transfusion-related acute lung injury is a serious but rare reaction that occurs when fluid builds up in the lungs but is not related to excessive volume of blood or blood products transfused. Symptoms include acute respiratory distress with no other explanation for lung injury such as pneumonia or trauma occurring within 6 hours of transfusion. TRALI is a leading cause of transfusion-related death reported to the FDA. The mechanism of TRALI is not well understood but is thought to be associated with the presence of antibodies in donor blood.
- **Transfusion-associated dyspnea (TAD)**
  Transfusion associated dyspnea is the onset of respiratory distress within 24 hours of transfusion that cannot be defined as TACO, TRALI, or an allergic reaction.
- **Transfusion-associated graft vs. host disease (TAGVHD)**
  Transfusion-associated graft vs. host disease is a rare complication of transfusion that occurs when donor T-lymphocytes (the "graft") introduced by the blood transfusion rapidly increase in number in the recipient (the "host") and then attack the recipient's own cells. Symptoms include fever, a characteristic rash, enlargement of the liver, and diarrhea that occur between 2 days and 6 weeks post transfusion. Though very rare, this inflammatory response is difficult to treat and often results in death.
- **Transfusion-transmitted infection (TTI)**
  A transfusion-transmitted infection occurs when a bacterium, parasite, virus, or other potential pathogen is transmitted in donated blood to the transfusion recipient.