Blood Products and Administration*
Teaching Points for Inpatient/Ambulatory/Clinic RN, LVN

- A Blood Transfusion Consent or Refusal Form must be completed and the original form placed in a patient’s paper medical record (except in some life-threatening emergencies) and a copy given to the patient.
- RN’s, board IV certified LVN’s, physicians, Nurse Practitioners and Perfusionists may verify and transfuse blood and blood products.
- An infusion set with an integral blood filter is used with all blood products, including plasma and cryoprecipitate.
- Administration of blood products is a high risk procedure.

Procedure

- Remove the transfusion record for verification; immediately before initiation of the transfusion, two licensed personnel must verify that the patient is the intended recipient of the blood component.
- Two identifiers, the patient’s full name and MRN as displayed on the patient’s armband must match that on the transfusion record and the unit tag.
- Verify the unit is not expired, ABO/Rh of patient/unit; compatibility (if done) and any special requirements.
- Once verification is complete, sign, date and time the transfusion record; two signatures are required.
- Obtain baseline blood pressure, temperature, pulse and respirations within 30 minutes of initiating transfusion.
- Obtain vital signs at the following intervals after starting the transfusion:
  - 15 minutes and then every hour during transfusion until complete.
  - Check a set of vital signs after ending the transfusion (within 30 minutes).
  - Record the vital signs, including O2sat on the transfusion record or in Epic.

Documentation

- Nurses need to specify the IV line type (peripheral or central) that was used to administer the blood product.
- Patient tolerance of transfusion.
- The volume of the unit and volume transfused (in Epic and on transfusion record).
- Time of completion or discontinuing of transfusion on the transfusion record.
- Indicate if a reaction to the blood component occurred.
- The transfusion record when completed is placed into the patient paper chart.

Most common causes of transfusion related death:
#1 Transfusion-related acute lung injury (TRALI)
#2 Transfusion-associated circulatory overload (TACO)
#3 Acute Hemolytic
#4 Septic

Other common transfusion reactions
Febrile Non-Hemolytic
Mild Allergic
Anaphylactic

Procedure for suspected or actual transfusion reaction

- Stop the transfusion.
- Measure and record vital signs.
- Recheck the patient’s full name and MRN on the patient’s armband with the transfusion record and unit tag.
- Disconnect administration set with blood bag, close aseptically, place in biohazard bad and return to Blood Bank.
- Report reaction to RN, provider and Blood Bank.
- Keep IV open with normal saline.
- Monitor vital signs and treat symptoms as per provider order.
- Provider to complete “Transfusion Reaction” section of transfusion record.
- Send to Blood Bank: properly labeled 6ml EDTA tube from patient after transfusion was disconnected.

General Transfusion Information
1. Blood lab specimen type and screen is held in the Blood Bank for 3 days.
2. Blood is to be started within 30mins of the time it taken from the Blood Bank (BB)
3. A provider order to transfuse blood is required (order includes the blood product, number of units or volume to be infused, rate of infusion and special instructions e.g. irradiation, autologous)
4. Blood and blood products should be infused within 4 hours after issue from BB
5. No medications or IV fluids, other than 0.9% Sodium Chloride may be infused in the same port/line as blood
6. A new blood administration set is to be used every 4 hours (except in OR cases) or after two units (whichever comes first)
7. Gloves are to be worn at all times when handling blood products
8. A blood filter (170micron) is used with all blood products (An additional 40 micron filter is used for the reinfusion of shed blood)
9. Autologous or donor directed donations require at least 72hrs to process through the American Red Cross or San Diego Blood Bank and should be ordered “leukocyte-reduced”
10. Dispose of blood bag/tubing and attached unit bag in the biohazard waste receptacle
11. Rh immune globulin prophylaxis (Rh-negative pregnant women; Rh negative postpartum women)

Source: MCP 617.1, MCP 250.1, MCP 614.1, MCP 640.2, Attach. A of MCP 617.1, D2434, Lippincott Manual of Nursing Practice, AACN Procedure Manual for C.Care Patricia Kopko, MD Director of Transfusion Medicine & Ellen Nyheim