Manual	Emergency Medical Services Administrative Policies and Procedures	Policy Number 540.04
Subject	Critical Care Paramedic Treatment Protocols **BLOOD/BLOOD PRODUCT INFUSION**	Page 1 of 2
References	California Code of Regulations Title 22, Division 9, Chapter 4	Effective 06/01/2018

I. PURPOSE

To authorize CCPs to monitor existing blood/blood product infusions during scheduled interfacility transport.

II. POLICY

Authorized CCPs will be permitted to monitor blood/blood product infusions during scheduled interfacility transports.

III. PROCEDURE

A. The following parameters shall apply to all patients with pre-existing blood/blood product infusions:

1. The blood or blood product must be hung and the infusion initiated by a RN or MD prior to the CCP accepting the patient for transfer.

2. Infusion rates shall be consistent with Policy 540.02 Attachment A - CCEMSA CCP Transfer Form

3. Patient temperature will be monitored every fifteen (15) minutes to monitor for signs of adverse effects.

4. Signed transfer orders from the transferring physician must be obtained prior to transport. Transfer orders must provide for maintaining the blood/blood products infusion during transport.

5. If blood product administration is interrupted (infiltration, accidental disconnection, malfunctioning pump, etc.) the CCP may restart the intravenous infusion line.

5. The following parameters shall apply to all patients with pre-existing blood/blood products infusions:

a. Infusion will be through filtered infusion tubing compatible with the CCP mechanical infusion device.

b. Regulation of the infusion rate will occur within the parameters as defined by the transferring physician. No other flow adjustments may be made by the CCP other than to discontinue the infusion in the event of complications.

c. No additives or medication shall be administered in the same IV tubing that is used to administer blood/blood products

Approved By		Revision
EMS Director	**Daniel J. Lynch** (Signature on File at EMS Agency)	
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6. Adverse reactions can include:

   a. Hemolytic reactions: Hemolytic reactions are the most life-threatening. Clinical manifestations may vary considerably: fever, headache, chest or back pain, pain at the infusion site, hypotension, nausea, generalized bleeding or oozing from a surgical site or shock. The most common cause is from ABO incompatibility due to clerical error or transfusion to the wrong patient. Chances of survival are dose dependent; therefore, it is important to stop the transfusion immediately if a hemolytic reaction is suspected. Give fluid challenge in accordance with EMS policy.

   b. Febrile non-hemolytic reaction: Chills and fever (rise from baseline temperature of 1^{O} C or 1.8^{O} F).

   c. Allergic reaction: Characterized by appearance of hives and itching (urticaria or diffuse rash). Refer to EMS policy for Allergic reaction/Anaphylactic shock after discontinuing the infusion**.**

   d. Anaphylaxis: May occur after administration of only a few cc's of a plasma-containing component. Symptoms include coughing, bronchospasm, respiratory distress, vascular instability, nausea, abdominal cramps, vomiting, diarrhea, shock and loss of consciousness. Reference EMS policy for Allergic reaction/Anaphylactic shock after discontinuing the infusion.

   e. Volume overload: Characterized by dyspnea, headache, peripheral edema, coughing, frothy sputum or other signs of congestive heart failure occurring during or soon after transfusion. Restrict fluids.

   f. In cases of suspected transfusion reactions or volume overload, the blood/blood products infusion will be discontinued and notification made to both transferring physician and Base Hospital.