


Sierra – Sacramento Valley EMS Agency Program Policy

Paramedic Monitoring Of Blood Transfusions During IFTs

	Effective: 06/01/2023	Next Review: 03/2026	842
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To provide parameters for paramedic monitoring of blood transfusions during interfacility transports (IFTs).

AUTHORITY:

- A. HSC, Division 2.5, § 1797.220.
- B. CCR, Title 22, Chapter 4, Article 1, § 100145.

POLICY:

- A. Only appropriately trained paramedics who are on duty with an S-SV EMS authorized paramedic IFT optional skills provider may monitor blood transfusions during IFTs.
- B. Paramedic monitoring of blood transfusions during IFTs is limited to those circumstances when there are no RN staffed Critical Care Transport (CCT) units available or when air ambulance transport is not appropriate/available.
- C. Patients will have pre-existing blood transfusions in peripheral or central IV lines. Prehospital personnel will not initiate blood transfusions.

PROCEDURE:

- A. All patients will be maintained on a cardiac monitor and a non-invasive blood pressure monitor throughout transport.
- B. The paramedic shall receive written orders from the transferring physician prior to leaving the transferring hospital. These orders shall include a telephone number where the transferring and/or base/modified base hospital physician can be reached during the patient transport in addition to the transfusion rate. These written orders shall be attached to the completed PCR.
- C. Patients will be hemodynamically stable at the time of transport.

-
- D. Paramedic personnel must be knowledgeable in the operation of the specific blood delivery/warming equipment.
- E. Regulation of the transfusion rate will be within the parameters defined by the transferring physician.
- F. Verify the patient and blood with the sending RN by checking the patient ID band against the blood label(s) and blood order for name, blood type and unit identifying number.
- G. Vital signs will be monitored and documented every 15 minutes and any time there is a change in patient condition or change in transfusion rate.
- H. Monitor the patient for any signs and symptoms of a transfusion reaction. Monitor temperature for adverse effects if transport time exceeds 15 minutes. The following are the most common types of transfusion reactions that may occur:
1. Hemolytic reactions: Hemolytic reactions are the most life-threatening. Clinical manifestations may vary considerably: fever, headache, chest or back pain, pain at infusion site, hypotension, nausea, generalized bleeding or oozing from surgical site, shock. The most common cause is from ABO incompatibility due to a 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 a fluid challenge.
 2. Febrile non-hemolytic reaction: Chills and fever (rise from baseline temperature of 1°C or 1.8°F). Document and report to hospital on arrival.
 3. Allergic reaction: Characterized by appearance of hives and itching.
 4. Anaphylaxis: May occur after administration of only a few ml's of a plasma containing component. Symptoms include coughing, bronchospasm, respiratory distress, vascular instability, nausea, abdominal cramps, vomiting, diarrhea, shock, and loss of consciousness.
 5. 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 fluid.
- I. If a suspected transfusion reaction occurs:
1. Interrupt the transfusion immediately.
 2. Contact the transferring and/or base/modified base hospital physician.
-

3. Consult appropriate treatment protocol.
 4. Document any suspected transfusion reactions.
 5. Report to hospital staff immediately upon arrival.
- J. The paramedic shall document on the PCR the total volume infused throughout the duration of the transport.