

	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	6006.01
	<u>PROGRAM DOCUMENT:</u> Paramedic Monitoring of Blood Transfusions During Interfacility Transfers (IFT)	Initial Date:	11/01/23
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 EMS Medical Director

 EMS Administrator

Purpose:

- A. To provide parameters for paramedic monitoring of blood transfusions during IFTs.

Authority:

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Chapter 4, Article 2

Policy:

Paramedic IFT Optional Skills

- A. Only providers approved by Sacramento County EMS Agency (SCEMSA) may be authorized to utilize Paramedic IFT optional skills.
- B. Only appropriately trained Paramedics employed by an approved provider may utilize Paramedic IFT optional skills.
- C. Patients will have pre-existing blood transfusions started at least 15 minutes prior to arrival at the transferring facility in peripheral or central IV lines. Prehospital personnel will not initiate blood transfusions.
 - 1. If the transfusion is started upon the arrival of transport, the transport will be delayed for 15 minutes to observe for any transfusion reactions.

Blood Transfusion Procedures

- A. All patients will be maintained on a cardiac monitor and a non-invasive blood pressure monitor.
- B. Written transfer orders from the transferring physician shall be obtained prior to transport. These orders will be attached to the electronic Patient Care Report (ePCR). These orders shall include:
 - 1. Orders for maintaining and adjusting blood transfusion rate during transport.
 - 2. Telephone number where the transferring physician can be reached during transport.
- C. Paramedic personnel must be knowledgeable in the operation of the specific blood delivery/warming device.
- D. Regulation of the transfusion rate will be within the parameters defined by the transferring physician.
- E. 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.
- F. Vital signs will be monitored and documented every 15 minutes and immediately if there is any change in patient status or change in transfusion rate.

- G. 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 the infusion site, hypotension, nausea, generalized bleeding or oozing from the surgical site, and shock. The most common cause is 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 the hospital on arrival.
 3. **Allergic reaction:** Characterized by the appearance of hives and itching.
 4. **Anaphylaxis:** This may occur after administration of only a few mLs 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.
- H. If a suspected transfusion reaction occurs:
1. Interrupt the transfusion immediately.
 2. Contact the transferring hospital physician.
 3. Consult appropriate treatment protocol.
 4. Document any suspected transfusion reactions.
 5. Report to hospital staff immediately upon arrival.
- I. The paramedic shall document on the ePCR the total volume infused throughout the duration of the transport.