

# SIERRA-SACRAMENTO VALLEY EMS AGENCY PROGRAM POLICY

REFERENCE NO. 818

## SUBJECT: VENTRICULAR ASSIST DEVICE (VAD)

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### **PURPOSE:**

To serve as a treatment standard for prehospital personnel treating patients with a Ventricular Assist Device (VAD).

### **AUTHORITY:**

California Health and Safety Code, Division 2.5, Sections 1797.202, 1798 and 1798.2.

California Code of Regulations, Title 22, Division 9, Chapter 2, 3 and 4.

### **PROCEDURE:**

- A. Follow appropriate S-SV EMS treatment protocol for the patient's condition.
- B. There are no medication contraindications in relation to the VAD.
- C. **Chest compressions are CONTRAINDICATED. Chest compressions and blunt chest and/or abdominal trauma may dislodge the VAD grafts and cause sudden death.**
- D. If defibrillation or cardioversion is necessary, follow the appropriate treatment protocol. The pump is insulated so that electrical therapy should not be an issue.
- E. A patient with a VAD will typically be pulseless as this is a continuous flow device. Pulse oximetry may not be measurable or accurate.
- F. A patient with a VAD will not have a systolic and diastolic blood pressure. Automatic blood pressures are not accurate and usually cannot be obtained. The patient will have one number (typical range is 65-100 mmHg) representing a "mean" blood pressure. This blood pressure is typically obtained via doppler, however, auscultation may be possible.
- G. A patient with a VAD may also have an Implanted Cardioverter-Defibrillator (ICD) or a Pacemaker/ICD.
- H. The patient's ECG heart rate will differ from the pulse rate since the VAD is not synchronized with the native heart rate.

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**Effective Date: 06/01/2011**

**Date last Reviewed / Revised: 01/11**

**Next Review Date: 01/2014**

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**Approved:**

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**SIGNATURE ON FILE**  
S-SV EMS Medical Director

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S-SV EMS Regional Executive Director

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- I. A patient with a VAD will most likely have a trained companion with them. The companion is familiar with the VAD and emergency troubleshooting. The companion should accompany the patient during transport and be responsible for the VAD.
- J. Patients/companions are taught to call 911 in an emergency then page the on-call VAD Coordinator immediately. The VAD Coordinator will typically be on the telephone to provide additional assistance to prehospital personnel when they arrive. The patient/companion will know how to contact the on-call VAD Coordinator if necessary.
- K. If transporting a patient to the hospital, the VAD emergency bag, power source, battery and battery charger should be brought with the patient.
- L. A patient with a VAD should typically be transported to the nearest appropriate VAD center. The patient and/or their companion will be able to advise prehospital personnel of the requested transport destination. If the patients' condition does not warrant transportation to the VAD center (trauma, burns, unable to establish an airway, etc.), or if there are any questions regarding appropriate destination, the base/modified base hospital shall be contacted for destination decision.