

# “Community VAD” Info Sheet

It is based on the **HeartMate II** Left Ventricular Assist System (majority of current VADs). These are guidelines / assistance for the CareFlight clinician providing emergency evaluation and intervention on a patient with a pre-existing self-contained implanted ventricular assist device (aka “**Community VAD**”).

*This VAD information references product brochure(s) / manual(s) not included here.*

**GOAL: Initial stabilization with transfer to a “VAD center” when appropriate.**

Reference HeartMate II Information and Emergency Assistance Guide brochure:

**ALARMS:** ✓ connections / ✓ power source / ✓ controller (? exchange) / ✓ issues behind VAD  
Reference Heartmate II Alarms for Clinicians brochure for system controller warning lights & sounds.

**If VAD Stops:** Absence of “humming” sound (via stethoscope) just above diaphragm.  
*Re-start ONLY if stopped less than 2 - 3 min. & “adequate anticoagulation”; otherwise per VAD Coord.*

To “restart” 1. Fix any external loose connections to the System Controller (external pack).

If pump still does not re-start:

2. Consider replacing the 2 batteries (one at a time!) with new, fully-charged pair.  
(Batteries are good for 3 up to 12 hrs.; charger / AC adapter is avail. from the patient.)

**VAD – General Emergency Approach:** *Remember – When all else fails, treat the patient!*

- **If no VAD alarms:** “Ignore the VAD” – assessment et al. per usual.
- **LOOK** for the patient’s “**Emergency Contact Card.**”
- **LOOK** for *extra batteries* (? w/ pt.) / **battery charger** or **AC adapter** (? @ home) / *extra system controller* (? w/ pt.).
- **Batteries:** must be charged & connected for the VAD for continuous function.
- **Anti-Coagulated:** assume the patient is anti-coagulated – coumadin is common.
- **EKG 12-Lead:** do per usual / no interference from VAD.
- **CPR:** avoid external chest compressions... unless “last ditch” & no other intervention effective.
- **Arrhythmias:** symptoms may not be classic: “think like an AED” (shock if malignant).
- **Defibrillation:** provide external defib per usual; if plugged in, d/c AC adapter during defib.
- **Pulses:** may not be detectable due to VAD continuous blood flow mechanism.
- **Blood Pressure:** *Goal* usu. SBP < 120 or MAP 70 - 90; Auto. BP OK if it registers (*difficult* to auscultate BP); Manual BP cuff with doppler: 1<sup>st</sup> sound ≈ MAP; Arterial line OK.
- **Pulse Oximetry:** may be difficult to obtain with “no-pulse” VADs.
- **Chest X-Ray:** incl. for verification of internal cannula placement x2 (aorta and left ventricle).
- **Resuscitation:** VAD is pre-load (RV) dependent (sensitive to volume status): **give IVF bolus.**

**General Info:** Reference Heartmate II Clinical Operation and Patient Management manual.

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Immediate Resources: Contact info as noted on the patient’s “**emergency contact card.**”

**OSU:** hospital operator (614) 293-8000 - ask for VAD Coordinator on-call.

**Christ Hospital:** VAD Coordinator office hours cell (513) 585-4944 / anytime pager (859) 572-1609;  
pager (859) 572-5050... **option 7... option 2...** for VAD physician on call re:

transfer.

**Cleveland Clinic:** hospital operator (800) 223-2273 or (216) 444-2200 -

ask for VAD Coordinator on-call (**pager #23400**).

MVH CICU Resource Nurse @ x8549 – for liaison with VAD Coordinator.

Thoratec Corp. Heartline: (800) 456-1477.

