

LEFT VENTRICULAR ASSIST DEVICE (LVAD)

ALL PROVIDERS/EMT

- ❑ Focused history and physical exam
 - Assess for evidence that resuscitation should not be attempted per the **Death Determination Guideline**.
 - Evaluate for Medical Alert Bracelet with instructions. Follow instructions as able.
 - The LVAD consists of an implanted, continuous flow pump attached to the left ventricle, an external control device, and power supply secured by a harness
 - Every patient should have a backup equipment bag for his or her LVAD.
 - Patients and families are usually well educated on the power supply of their LVAD and the use of the backup controller/driver. Utilize them and follow their directions on scene.
 - Patients with continuous flow assist devices will not have a palpable pulse. Assess for signs of adequate perfusion using skin signs and blood pressure.
- ❑ Continuous cardiac, ETCO₂, and pulse oximetry monitoring when available.
- ❑ **Treatment Plan**
 - Check to see if the patient is responsive.
 - Check if the LVAD is functioning by listening for a HUM.
 - Check the patient's rhythm.
 - Check for alarm lights and sounds – Red high-priority alarms are URGENT.
 - Check cable connections.
 - Check power source.
 - Change controller if needed.
 - Priority is placed on restarting the pump. If unable to restart the pump, then begin chest compressions on upper half of the sternum.
- ❑ **Key Considerations**
 - Determine Type of Device – Heart Mate II, Jarvik 2000, or Heartware
 - Patients or their families should have a phone number to their LVAD coordinator. This person should be used as the OLMC.
 - IF the number is not available, contact the LVAD Coordinator at the University Medical Center (801-581-2121) OR the intermountain Medical Center (801-507-LVAD), for assistance.
 - Transport to the specialty center that implanted the device is preferable, if stable and transport times are reasonable, as directed by the OLMC.
 - BLS airway support as needed.

ADULT

AEMT

- ❑ Supportive care of airway, vascular access and fluid therapy per **IV/IO Access and Fluid Therapy Guidelines**
- ❑ LVADs are preload dependent and a fluid bolus may improve perfusion

PARAMEDIC

- ❑ ACLS medications as indicated