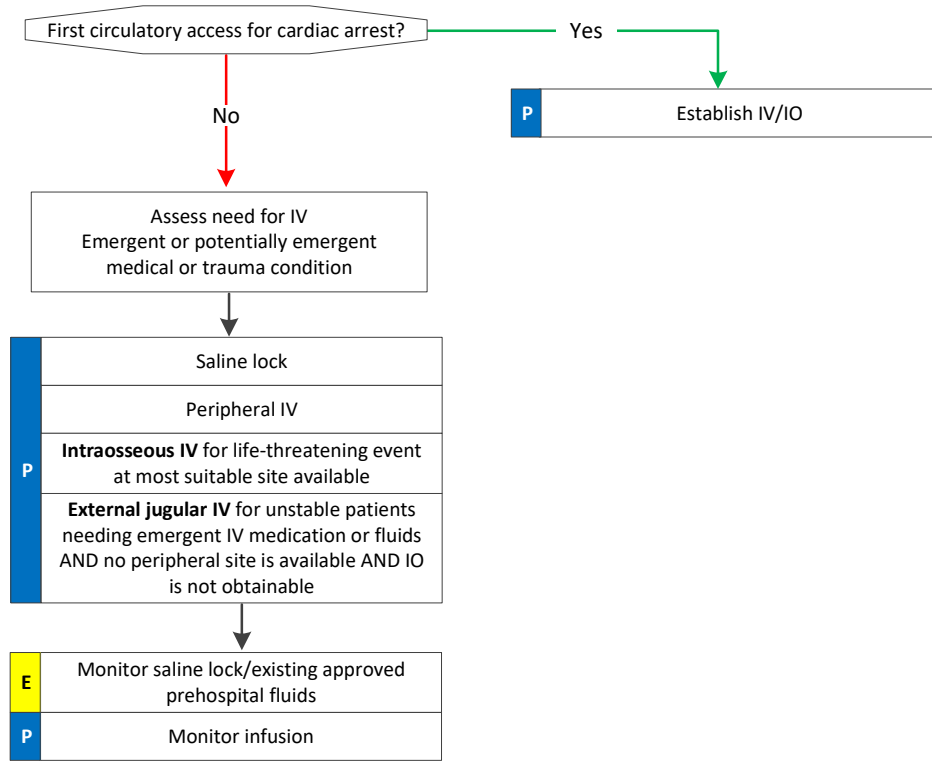


IV and IO Access



- In the setting of **cardiac arrest**, any preexisting dialysis shunt or external central venous catheter may be used.
- In patients who are **hemodynamically unstable**, pre-existing indwelling central lines can be used to deliver fluid and medications.
- Approved prehospital IV solutions include: Isotonic (balanced) saline solution, Ringer's lactate, and glucose solutions with no additional additives.
- Any working venous catheter already accessed prior to EMS arrival may be used for EMS IV fluids and medications.
- Use Chlorhexidine for all IV/IO attempts.
- Intraosseous access should be obtained only with the appropriate adult or pediatric device (e.g. IO drill).
- Any prehospital fluids or medications approved for IV use may also be given through IO.
- External jugular access is only indicated for patients ≥ 15 years of age.
- All IV rates should be kept at TKO (minimal rate to keep the vein open) unless administering fluid bolus.
- Use micro drip sets for all patients ≤ 6 years of age.
- Upper extremity IV sites are preferable to lower extremity sites; lower extremity sites are discouraged in patients with vascular disease or diabetes.
- In post-mastectomy patients and patients with a working dialysis fistula, avoid IV attempts, injections and blood pressure measurements in the upper extremity on the affected side.

