

Vascular Access

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Approval: John Poland – Executive Director

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INDICATIONS

• Vascular access may be established by AEMT personnel when there is a current or anticipated need to administer intravenous medications/fluids.

ADDITIONAL DIRECTIONS/CONSIDERATIONS

- Do not delay transport to establish vascular access unless clinically necessary.
- Avoid establishing vascular access in an extremity with a functioning dialysis shunt unless no other vascular access is available/appropriate.
- Intraosseous (IO) access (pediatric pts only) shall only be attempted if unable to establish peripheral vascular access & immediate medication/fluid administration is necessary.
- Limit vascular access attempts to three (3) unless necessary for emergent treatment.
- Do not connect the primary IV tubing directly to the IV catheter. IV extension/saline lock tubing shall be utilized between the primary IV tubing and the IV catheter.

INTRAOSSEOUS (IO) ACCESS (PEDIATRIC PTS ONLY)

Contraindications:

- Fracture/suspected vascular compromise in targeted bone or infection at area of insertion site.
- Excessive tissue or absence of adequate anatomical landmarks.
- Previous significant orthopedic procedure at site or IO access in targeted bone within past 48 hours.

Procedure:

- Prep selected site (see image) with a recognized antiseptic agent & wipe dry with a sterile gauze pad.
- Insert device per manufacturer specific instructions.
- Attach primed extension set to needle & secure needle per manufacturer instructions.
- For pts unresponsive to pain:
 - Rapid flush with 10 mL of normal saline.
- For pts responsive to pain:
- Prime extension set with 2% lidocaine (AEMT II).
- Slowly administer 2% lidocaine 0.5 mg/kg (max: 40 mg) over 120 sec (**AEMT II** & pediatric pts only).
- Allow lidocaine to dwell in IO space 60 sec.
- Rapid flush with 10 mL of normal saline.
- Slowly administer a subsequent ½ dose of 2% lidocaine over 60 sec.
- Connect fluids to extension set infusion may need to be pressurized to achieve desired rate.
- Dress site and secure tubing.

