



EZ-IO:

Intraosseous Placement Kits



Location:

EZ-IO is located in a storage box on the wall of each unit, which includes a driver, needles, and site dressing.

Use:

Per WVU Medicine Policy, this type of access should only be used in a life-threatening emergency and must be removed within 24 hours.

Insertion:

Appropriate individuals who have been validated are able to place an EZ-IO.

Indications:

- Need for immediate vascular access where peripheral access is impossible with previous failed vascular access attempts.
- Altered level of consciousness or respiratory compromise.
- Hemodynamic instability, requiring urgent resuscitation or cardiac arrest.

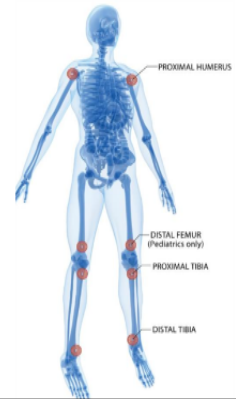
Contraindications:

- Properly functioning vascular access
- Acute fractures in selected bone, or previous orthopedic procedure.
- Preexisting medical disease near proposed insertion site, and in sites with noticeable burns, infection or recent IO placement.

Adults	Pediatrics
<ul style="list-style-type: none"> • Proximal humerus • Proximal tibia • Distal tibia 	<ul style="list-style-type: none"> • Distal femur • Proximal humerus • Proximal tibia • Distal tibia

Studies suggest the humerus may be the superior extremity access site for flow rates, drug delivery and management of infusion pain. Proximity to the heart ensures rapid infusion of medications in 3 seconds.

2010 estimate flow rates in adults approximated 5 liters/hour through the humerus & 1 liter/hour through the proximal tibia.



Complications:

- Compartment syndrome
- Soft tissue necrosis
- Fever
- Limb discoloration
- Swelling and pain
- Parathesia
- IO is not MRI compatible

Cautions:

- IO Access may be compromised if the line is not used for prolonged periods. Avoid extreme pressure with flushing.
- Obtain central or peripheral access as soon as possible to remove IO. **Maximum dwell is 24 hours.**
- Always assess for patency, blood return, symptoms of infiltration as well as proximal and distal pulses.
- Use caution with hypertonic solutions, chemotherapy, and vesicants. Routine administration via IO should not be used.