

# Use of the EZIO in the Emergency Department

## Indications for EZ IO

- The ARROW® EZ-IO® Intraosseous Vascular Access System is indicated for adult and pediatric patients any time vascular access is difficult to obtain in emergent, urgent or medically necessary situations for 24 hours
- Emergent, urgent or medically necessary situations
- Immediate need for medications or fluids
- Prevention of delays to vascular access during critical situations
- Difficult Vascular Access (DVA)
- Vein preservation
- Safe: <1% serious complication rate
- Fast: Vascular access in seconds
- Efficient: 97% first-attempt success rate
- Versatile: Can be placed by any qualified healthcare provider
- Convenient: Requires no additional equipment or resources

## Contraindications for EZ IO

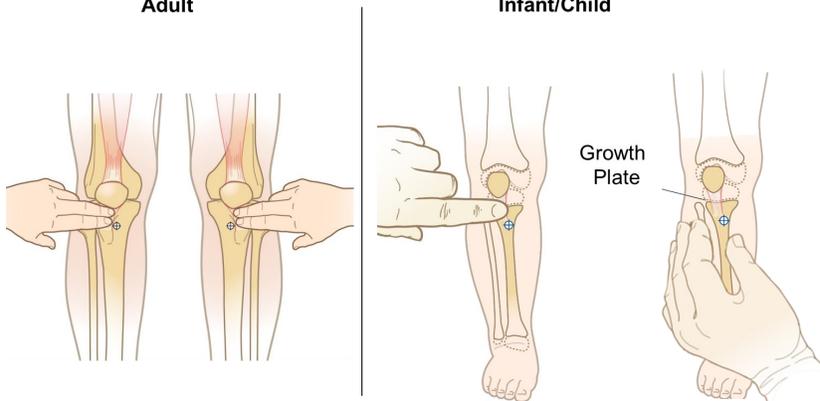
- Fracture of target bone
- Infection at area of insertion
- Inability to identify landmarks
- IO or attempted IO access in target bone within previous 48 hours
- Prosthesis or orthopedic procedure near insertion site

## EZIO Insertion sites

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

Adult

Infant/Child



## EZ-IO® Proximal Tibia Insertion Site Identification – Adult

Extend the leg. Insertion site is approximately 2cm **medial** to the tibial tuberosity, or approximately 3cm (two finger widths) below the patella and approximately 2cm **medial**, along the flat aspect of the tibia.

## EZ-IO® Proximal Tibia Insertion Technique - Adult

1. Prepare the site by using antiseptic of your choice
2. Use a clean, “no touch” technique
3. Remove the needle set cap
4. Stabilize the extremity
5. Aim the needle set at a 90-degree angle to center of the bone
6. Push the needle set tip through the skin until the tip rests against the bone
7. The 5mm mark must be visible above the skin for confirmation of adequate needle set length
8. Gently drill, advancing the needle set approximately 1-2cm after entry into the medullary space or until the needle set hub is close to the skin
9. Hold the hub in place and pull the driver straight off
10. Continue to hold the hub while twisting the stylet off the hub with counter clockwise rotations  
The catheter should feel firmly seated in the bone (1<sup>st</sup> confirmation of placement)
11. Place the stylet in a sharps container
12. Attach a **primed** EZ-Connect® extension set to the hub, firmly secure by twisting clockwise
13. Aspirate for blood/bone marrow (2<sup>nd</sup> confirmation of placement)
14. Flush to break bone matrix
15. Stabilize and secure.
16. Apply bracelet on patient.

## EZ-IO® Removal Technique

1. Remove EZ-Connect and EZ-Stabilizer dressing
2. Stabilize catheter hub and attach a Luer lock syringe to the hub
3. Maintaining axial alignment, twist clockwise and pull straight out  
Do not rock the syringe
4. Dispose of catheter with syringe attached into sharps container
5. Apply pressure as needed, dress per institutional protocol

