

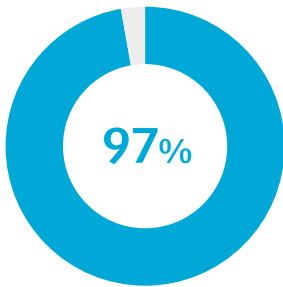


Arrow®
EZ-IO®
Intraosseous Vascular Access System



Safe¹, Fast^{2,3*}, Effective⁴

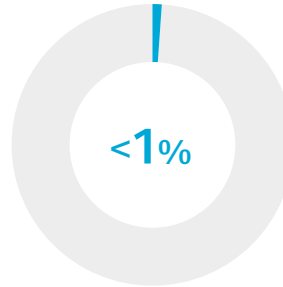
In any situation where intravenous access is difficult or impossible to obtain in emergent, urgent, or medically necessary cases the Arrow® EZ-IO® Intraosseous Vascular Access System from Teleflex is a safe¹, fast^{2,3*} and effective⁴ solution. The EZ-IO System is indicated for up to 24 hours and provides peripheral venous access with central venous catheter performance.^{5-6,17†}



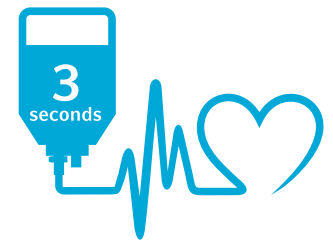
97% first-attempt success rate⁴



Achieve vascular access within 10 seconds²



Safe; <1% serious complication rate¹



3 seconds to heart with medication/fluids^{3*}

Clinical Conditions for IO Consideration



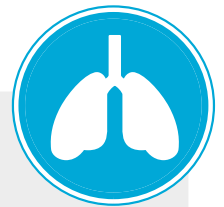
Shock

- Septic
- Trauma
- Burns
- Dehydration
- Anaphylactic
- Post-partum hemorrhage



Cardiac

- Cardiac arrest
- Dysrhythmia
- Myocardial infarction
- CHF
- Chest pain



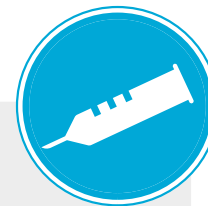
Respiratory

- Respiratory failure
- Intubation (RSI)
- Status asthmaticus
- COPD
- Pneumonia



Neurologic

- Status epilepticus
- Stroke
- Head injury
- Altered mental status
- Encephalopathy

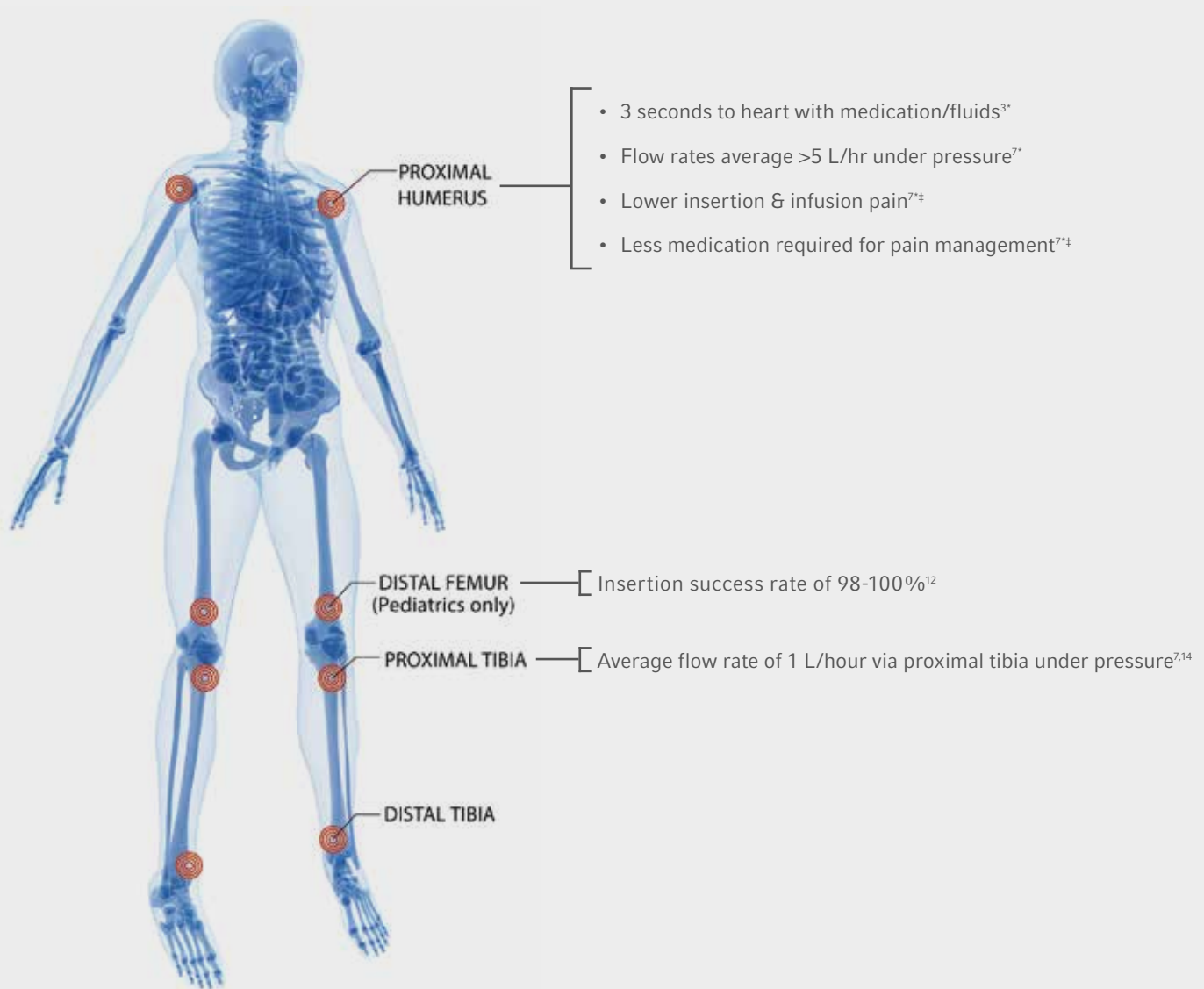


Other

- Therapeutic hypothermia
- Sickle cell crisis
- Diabetic ketoacidosis
- Pediatric illness

Arrow® EZ-IO® System Education

EZ-IO Systems Insertion Sites



Do NOT use the powered EZ-IO Vascular Access System in the sternum

Infusions and Medications



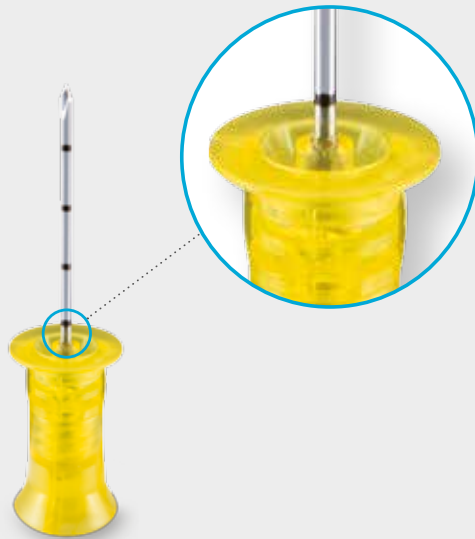
- For optimal flow infuse with pressure
- Many fluids and medications that can be given via a peripheral IV can be given via the IO route using the same dose, rate, and concentration⁸⁻¹¹

Success Rates: IO>IV



- Success rates for intraosseous vascular access have been shown to be superior to that of IV access during cardiac arrest in comparative clinical studies^{15,16}

Needle Selection



With the needle set inserted through the soft tissue and touching bone, the 5 mm mark (at least one black line) must be visible outside the skin for confirmation of adequate needle set length **prior to drilling**.

Consider Using Anesthetic for Patients Responsive to Pain

The following recommendations are based on published intraosseous clinical literature:

2% lidocaine (preservative-free and epinephrine-free)

Adult: Typically 40 mg

Infant/Child: Typically 0.5 mg/kg (NOT to exceed 40 mg)

Lidocaine
Initial dose
120 seconds

Dwell
60 seconds

Rapid Flush

Lidocaine ½
Initial dose
60 seconds

≥ 4 minutes total time

Observe cautions/contraindications for lidocaine, confirm dose per solution

Disclaimer: Selection and use of any medication, including lidocaine, given IV or IO is the responsibility of the treating physician, medical director, or qualified prescriber and is not an official recommendation of Teleflex Incorporated. The information provided is a summary of information found in the cited reference materials. This information is not intended to be a substitute for sound clinical judgment or your institution's treatment protocols. Teleflex Incorporated is not the manufacturer of lidocaine. Users should review the manufacturer's instructions or directions for use and be familiar with all indications, side effects, contraindications, precautions and warnings prior to administration of lidocaine or any other medication. Teleflex Incorporated disclaims all liability for the application or interpretation of this information in the medical treatment of any patient. For additional information please visit www.eziocomfort.com.

24 Hour Clinical Support: 1.800.680.4977

Arrow® EZ-IO® Intraosseous Vascular Access System Ordering Information



Arrow® EZ-IO® System Ordering Information

ITEM NUMBER	DESCRIPTION	PATIENT WEIGHT	QTY/CASE
9058	EZ-IO® Vascular Access Driver	NA	1
9079P-VC-005	EZ-IO® 45 mm Needle Set* + EZ-Stabilizer®	≥40 kg	5
9079-VC-005	EZ-IO® 45 mm Needle Set*	≥40 kg	5
9001P-VC-005	EZ-IO® 25 mm Needle Set* + EZ-Stabilizer®	≥3 kg	5
9001-VC-005	EZ-IO® 25 mm Needle Set*	≥3 kg	5
9018P-VC-005	EZ-IO® 15 mm Needle Set* + EZ-Stabilizer®	3-39 kg	5
9018-VC-005	EZ-IO® 15 mm Needle Set*	3-39 kg	5
9066-VC-005	EZ-Stabilizer® Dressing	NA	5

*Each Needle Set includes a 15 gauge sterile EZ-IO® Needle, EZ-Connect® Extension Set, Patient Wrist Band and Needle Vise® Sharps Block



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15. Clemency B, Tanaka K, May P, et al. Intravenous vs. intraosseous access and return of spontaneous circulation during out of hospital cardiac arrest. *Am J Emerg Med* 2016. doi: 10.1016/j.ajem.2016.10.052
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17. Based on Adult Proximal Humerus EZ-IO® System Insertion data

Download the EZ-IO® System App



Teleflex is the home of Arrow®, Deknatel®, Hudson RCI®, LMA®, Pilling®, Rüscher® and Weck® – trusted brands united by a common sense of purpose.

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*Based on adult proximal humerus data.

** Consult with the laboratory to determine acceptability of IO blood specimens for analysis.

†Compared to single lumen Central Venous Catheters (CVCs).

‡Compared to EZ-IO® System tibial insertions

Needle Vise is a trademark or registered trademark of Atrion Medical Products, Inc.

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PROXIMAL HUMERUS SITE ADVANTAGES

- Flow rates average 5 L/hr¹
- 3 seconds to heart with medications/fluids²
- Lower insertion and infusion pain¹
- Less medication for pain management¹
- No reported compartment syndrome due to IO placement

Learn more at TELEFLEX.COM/EMS

1



Place the patient's hand over the abdomen (elbow adducted and humerus internally rotated).

2



Place your palm on the patient's shoulder anteriorly.

- The area that feels like a "ball" under your palm is the general target area.
- You should be able to feel this ball, even on obese patients, by pushing deeply.

3



Place the ulnar aspect of one hand vertically over the axilla. Place the ulnar aspect of the opposite hand along the midline of the upper arm laterally.

4



Place your thumbs together over the arm.

- This identifies the vertical line of insertion on the proximal humerus.

5



Palpate deeply as you climb up the humerus to the surgical neck.

- It will feel like a golf ball on a tee – the spot where the "ball" meets the "tee" is the surgical neck.

The insertion site is on the most prominent aspect of the greater tubercle, 1 to 2 cm above the surgical neck.

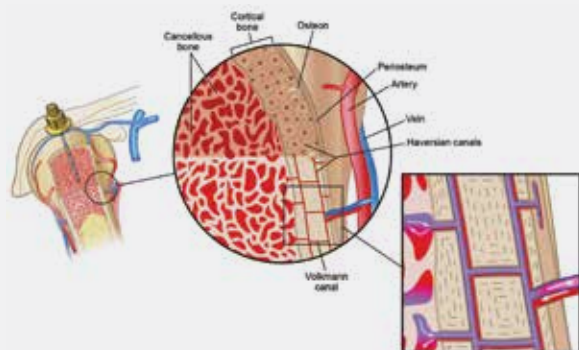
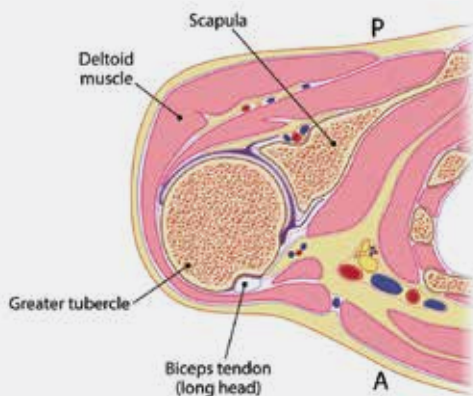
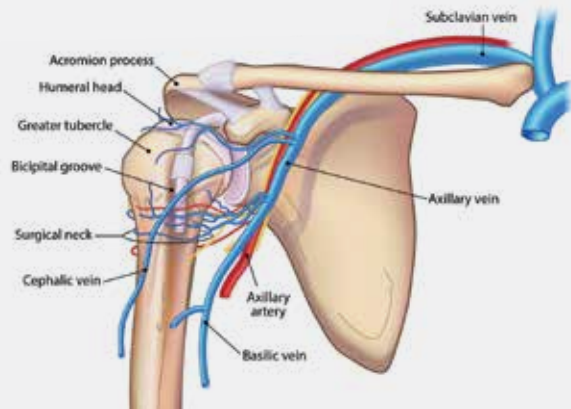
6



Point the needle set tip at a 45-degree angle to the anterior plane and posteromedial.



PROXIMAL HUMERUS ANATOMY



EZ-IO ADVANTAGES

- <1% serious complication rate³
- Achieves vascular access with anesthesia and good flow in 90 seconds⁴
- 97% first-attempt access success rate⁵
- Can be placed by any qualified healthcare provider
- Requires no additional equipment or resources⁶

Learn more at TELEFLEX.COM/EMS



EZ-IO® POWER DRIVER

ORDER NO.	DESCRIPTION	QTY
9058	EZ-IO® Power Driver	1



EZ-IO® NEEDLE+ STABILIZER KITS

ORDER NO.	DESCRIPTION	QTY
9079P	45 mm Needle	5
9001P	25 mm Needle	5
9018P	15 mm Needle	5



Each set includes a 15 Ga. sterile EZ-IO® Needle Set, EZ-Stabilizer® Dressing, EZ-Connect® Extension Set, EZ-IO® Patient Wrist Band and NeedleVISE® 1 Port Sharps Block

Potential complications may include local or systemic infection, hematoma, extravasations, or other complications associated with percutaneous insertion of sterile devices.

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- * Research sponsored by Teleflex Incorporated (Vidacare LLC)

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