

<b>INTRAOSSEOUS CANNULATION</b>			
Name: _____ Date: _____ License # _____			
<p>Intraosseous cannulation provides a safe and reliable method for rapidly achieving a route for administration of medications, fluids, and blood products in a non-collapsible vascular space. Onset of action and medication levels following intraosseous infusion during CPR is comparable to that achieved following intravenous administration.</p> <p>A. <u>Assessment/Treatment Indicators:</u></p> <ol style="list-style-type: none"> <li>1. Resuscitation</li> <li>2. Urgent need to administer fluids or medications intravenously with inability to establish peripheral on two (2) attempts.</li> </ol> <p>B. <u>Contraindications:</u></p> <ol style="list-style-type: none"> <li>1. Fractures of involved bone.</li> <li>2. Infected burn or area of cellulitis overlying the site of insertion.</li> <li>3. Congenital deformity or history of osteogenesis imperfecta or osteopetrosis.</li> </ol> <p>C. <u>Potential complications and interventions:</u></p> <ol style="list-style-type: none"> <li>1. Needle becomes obstructed with bone or bone marrow: replace with a second needle by passing through the same cannulation site, provided no evidence of infiltration is observed, or consider IO cannulation of contralateral tibia.</li> <li>2. Local infiltration of fluids, medications, or local bleeding: stop infusion and apply pressure with sterile gauze.</li> </ol>			
<u>Equipment:</u>			
1. Intraosseous needles: 15ga or 18ga	2. Betadine solution or swabs	3. Sterile 2 x 2 gauze and gloves	4. Syringes (2) 10 ml
			5. Broselow Pediatric Resuscitation Tape (Pediatric patients only).
			6. Adhesive tape
<b>Performance Criteria</b>			<b>Pass</b>
			<b>Fail</b>
1.	Uses universal precautions.		
2.	States indications, age limit, and contraindications of IO cannulation.		
3.	Assembles equipment and checks the needle to ensure bevels of the outer needle and internal stylet are properly aligned.		
4.	Identifies insertion site at the proximal, anterior tibia, 1-3 cm below tuberosity on flat medial surface.		
5.	After skin prep, places child in supine position and holds leg firmly		
6.	Directs and inserts needle perpendicular to bone using a boring or screwing motion until needle "pops" into the bone marrow space (marked by sudden lack of resistance). Needle should stand-alone.		

SAN JOAQUIN COUNTY  
EMERGENCY MEDICAL SERVICES AGENCY

TITLE: INTRAOSSEOUS CANNULATION PERFORMANCE CRITERIA EMS Policy No. 2546

Performance Criteria		Pass	Fail
7.	Attempts aspiration of bone marrow to assist in placement confirmation.		
8.	Disconnects first syringe and connects second syringe, flushing with at least 3 ml of normal saline, observing for fluid extravasation.		
9.	After satisfactory flushing, attaches IV tubing and secures needle with sterile 2X2's and tape. Fluid should run freely.		
10.	Obtains a restraint order prn to prevent inadvertent dislodging of the needle.		
11.	States potential complications of IO cannulation and interventions.		

Please provide comments for any item that is marked as failed: \_\_\_\_\_  
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\_\_\_\_\_  
Name & Signature of Evaluator

\_\_\_\_\_  
Date

Effective: February 15, 2010  
Supersedes: January 1, 2010

Approved: Signature on File  
Medical Director

Signature on File  
EMS Administrator