

Intramuscular Access & Admin – 30.085

DEFINITION:

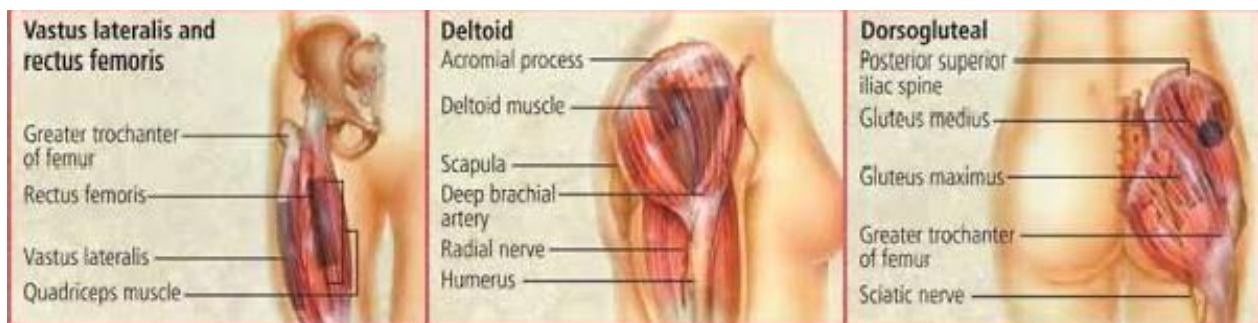
In the absence of an established IV, intramuscular (IM) is a rapid route of offering a high level of bioavailability of the medication being administered. The intramuscular route can be administered into a desired muscle to provide effective medication uptake. The rich vasculature of the muscle masses provides a direct route into the bloodstream for the medication.

INDICATIONS:

- A. Patient without IV access requiring urgent medication administration where IM access/administration of a medication has been identified as an option per protocol.

PROCEDURE:

- A. Select IM medicine access location. Prioritized locations of IM access will be:
 1. Mid lateral portion of the thigh. Locate the middle third of the thigh and select a lateral approach angle. (Max volume dose of 5 ml per site)
 2. Lateral deltoid muscle. (Max volume dose of 2 ml per deltoid)
 3. Buttocks or dorsogluteal site. This site is least desirable as it has more fatty tissue with less blood vessels resulting in poor uptake of the medication into the blood stream, especially in obese patients. (Max volume dose of 5 ml per site)
- B. Max volumes per site may need to be adjusted (decreased) for smaller/elderly adults
- C. Cleanse site with alcohol. Proper iodine procedure may be used if no allergy exists.
- D. Stretch skin at selected site taught.
- E. Insert needle safely into muscle at a 90 degree angle to the skin at insertion point. Insertion should be at a minimum 1" but not over 3".
- F. Withdraw syringe to ensure you are not into a blood vessel. If you witness blood come back into the syringe, withdraw needle and syringe, dispose properly and select another site.
- G. If site is desirable after needle insertion dispense medication by depressing syringe plunger slowly.
- H. Remove needle at the same 90 degree angle as initial insertion.
- I. Cap with safety cap that is attached if available and dispose of the needle safely into a sharps container.
- J. Release taught skin and gently rub site to assist with medication uptake.



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PEDIATRIC PATIENTS:

A. Pediatric IM administration location is the same as adults. See below for guidance on volumes by site.

Guidelines for Intramuscular and Subcutaneous Injection Administration					
Intramuscular Injections²					
SITE ¹	Infant	Toddler	Preschool-Aged	School-Aged	Adolescent/Adult
Vastus lateralis	Needle length: 5/8 inch Volume: 0.5 mL **recommended for infants < 7 months of age	Needle length: 5/8 – 1 inch Volume: 0.5 – 1 mL	Needle length: 1 inch Volume: 1 mL	Needle length: 1 inch Volume: 1.5 – 2 mL	Needle length: 1-3 inches Volume: 1-5 mL
Ventrogluteal	Needle length: 5/8 inch Volume: 0.5 mL **recommended for infants > 7 months of age	Needle length: 5/8 – 1 inch Volume: 1 mL	Needle length: 1 inch Volume: 1.5 mL	Needle length: 1-1.5 inches Volume: 1.5-2 mL	Needle length: 1-3 inches Volume: 1-5 mL
Deltoid	Not recommended	Needle length: 5/8 – 1 inch Volume: 0.5 mL	Needle length: 5/8 – 1 inch Volume: 0.5 mL	Needle length: 5/8 – 1 inch Volume: 0.5 – 1 mL	Needle length: 1-3 inches Volume: 0.5 – 2 mL
Dorsogluteal	Not recommended	Not recommended	Not recommended	Needle length: 1/2-1.5 inches Volume: 1.5-2 mL	Needle length: 1-3 inches Volume: 1-5 mL
Subcutaneous Injections² : May be given in upper outer arm, anterior thigh, abdomen, upper back, or buttocks					
Infant or Child		Adolescent or Adult		Obese Person	
Needle length: 3/8 inch Needle gauge: 25 Volume: *no more than 0.1 mL for intradermal *no more than 0.5 mL for small child * no more than 1 mL preschool or school-aged child		Needle length: 1/2 - 5/8 inch Needle gauge: 25-27 Volume: 0.5 – 1 mL		Needle length: 7/8 inch Needle gauge: 25-27 Volume: 0.5 – 1 mL	

¹Follow manufacture's instructions for required administration sites.

²Needle length should be sufficient to reach muscle.

B.