

Intramuscular Injection Guidelines for Needle Length and Gauge Selection*

| INTRAMUSCULAR (IM)** | | Location of Injection | Needle Length | Needle Gauge | Needle Angle |
|-----------------------------|---|--|--|---------------------|---------------------|
| Pediatric | Infants < 18 months | <ul style="list-style-type: none"> • Vastus lateralis muscle (0.5 mL vol.) | 7/8" - 1" | 25 - 27 G | 90° |
| | Children (>18 months and walking to 18 years) | <ul style="list-style-type: none"> • Deltoid muscle • Ventrogluteal site • Dorsogluteal site—not recommended for <3 years • Vastus lateralis muscle | 7/8" - 1 1/4" | 22 - 25 G | 90° |
| Adult | > 18 years | <ul style="list-style-type: none"> • Deltoid muscle, Ventrogluteal site—may be best site for cachectic adults • Dorsogluteal site—avoid in obese adults • Vastus lateralis muscle | 1" - 1 1/2" (up to 3" for large adults) | 19 - 25 G | 90° |

* Adapted from Fundamentals of Nursing: Human Health and Function, R. Craven, C. Hirnle, 4th ed. Lippincott Williams & Wilkins 2003

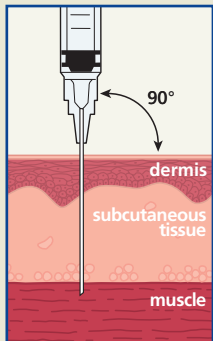
** Prior to administering an IM injection, refer to your procedure manual to determine the injection site utilizing body landmarks.



ISO Hub Color Standards for safety-engineered needles

Intramuscular (IM) Injection Guidelines:

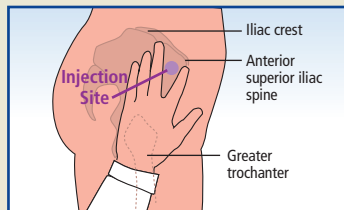
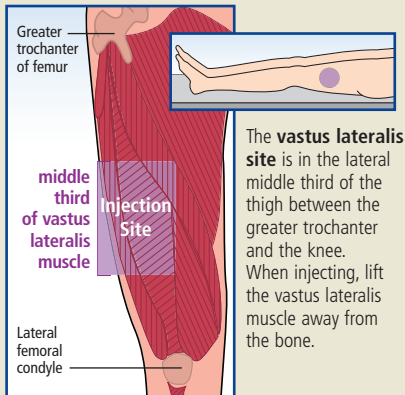
Injection Route:



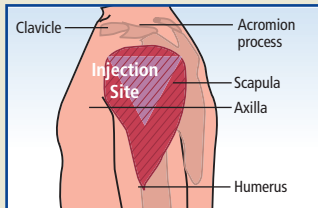
Injection Procedure:

- Spread the skin taut, (except in vastus lateralis which requires lifting the muscle) and insert the needle at a 90° angle.
- Pull back plunger slightly. If blood appears, remove needle, dispose properly and prepare a new injection.
- If no blood is present inject medication slowly.

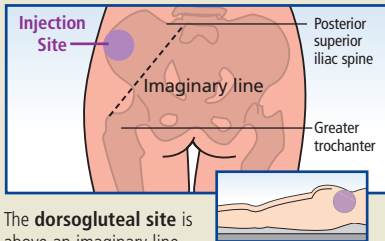
Injection Sites:



The **ventrogluteal site**: place the palm over the greater trochanter, form a "V," with the middle finger toward the iliac crest and the index finger toward the anterior superior iliac spine. Inject within the center of the "V," below the anterior superior iliac crest.



The thickest part of the **deltoid muscle** is 2.5-5cm (1-3 finger breadths) below the lower edge of acromion process of the scapula over the midaxillary line.



The **dorsogluteal site** is above an imaginary line between the greater trochanter and the posterior superior iliac crest. The injection is administered laterally and superior to this imaginary line.