

# Parenteral Study Guide

Injectable Routes:	Taught:	Pertinent Injection Information per Best Practice Guidelines:
<p><b><u>Intramuscular</u></b>            1 - 1½”            18 – 25g</p> <ul style="list-style-type: none"> <li>• Max rec. vol: 3 mL (V-gluteal/V-Lateralis)</li> <li>• Max rec. vol: 1 mL (Deltoid)</li> </ul> <p>* most common</p>	<ul style="list-style-type: none"> <li>• 90° degree angle</li> <li>• Z-track by pulling skin 1-1½” to side, insert needle, aspirate, inject med if no blood, withdraw needle &amp; release skin (locks med into muscle)</li> <li>• May apply pressure ONLY</li> </ul>	<ul style="list-style-type: none"> <li>• ALWAYS LANDMARK FIRST</li> <li>• Z-track Deep IM Injections or if med is viscous</li> <li>• Aspirate first - NEVER inject blood</li> <li>• Administer 1mL/10secs</li> <li>• Wait 10 secs to remove needle &amp; release skin</li> <li>• <b><u>If very thin or obese carefully evaluate needle choice</u></b></li> <li>• Deltoid is used <i>primarily</i> for Vaccines/Immunizations</li> </ul>
<p><b><u>Subcutaneous</u></b>            3/8 - 5/8”            25-27g</p> <p>Max vol: 1.5mL</p> <hr/> <p><b><u>Insulin:</u></b>  <b>U-100 syringe</b></p> <p>Max vol: 1mL</p>	<p><b><u>Insulin:</u></b></p> <ul style="list-style-type: none"> <li>• injected at a 90° (<u>most common</u>)</li> <li>• Have optional sub-Q sites</li> <li>• <b><u>Always use “Unit” insulin syringe</u></b></li> <li>• <b><u>Do Not</u></b> aspirate or massage <b><u>any</u></b> sub-Q injections</li> <li>• <b><u>Do Not Shake Insulin</u></b></li> </ul>	<p><b><u>Heparin</u></b> (anticoagulant)</p> <ul style="list-style-type: none"> <li>• Deep sub-Q abdomen <u>90°</u> “love-handle region” (at least 4” away from umbilicus)</li> <li>• Can administer 45° if can’t bunch &gt; 2” SQ tissue</li> <li>• Bunch entire injection process</li> </ul> <p><b><u>Lovenox</u></b> (anticoagulant)</p> <ul style="list-style-type: none"> <li>• <u>Always given deep sub-Q @ 90°</u> to abdominal “love handles” (at least 4” away from umbilicus) (45° if unable to bunch 2 inches)</li> <li>• prefilled syringe with airlock bubble (don’t remove)</li> <li>• Bunch entire process</li> <li>• *Position patient in reclined supine position if possible*</li> </ul>
<p><b><u>Intradermal</u></b>            3/8- 5/8 ” *(most common ½ to 5/8”)            25-27g</p> <p>Max vol: 0.1mL</p>	<ul style="list-style-type: none"> <li>• 5° - 15° degree angle</li> <li>• Don’t aspirate or massage</li> <li>• Middle third Forearm</li> </ul>	<ul style="list-style-type: none"> <li>• <b><u>Bevel up</u></b> – visualization of a bleb / wheel indicates successful placement</li> </ul>

**REMEMBER: ALWAYS WITHDRAW THE NEEDLE AT THE SAME ANGLE INSERTED!!**