

INTRADERMAL ADMINISTRATION

Intradermal Equipment:

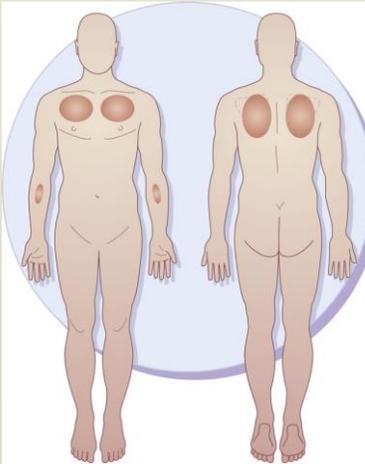
Syringe: 1mL Tuberculin

Needle length: ¼ – ½ inch

Needle gauge: 25-27 gauge

Volume injected: 0.01 – 0.1 mL

Angle of insertion: 5-15 degrees



1. Verify order, patient allergies, medical history and contraindications
2. Perform hand hygiene. Select correct syringe, needle gauge and length.
3. Select correct medication. Verify medication label with MAR.
4. Swab stopper of vial with alcohol. Pull up amount of air equal to amount of medication and instill air into vial.
5. Verify medication. Invert vial and syringe and draw up amount of medication ordered. Tap out any visible bubbles in syringe.
6. You may recap “clean” needle using the one-handed scoop. (DO NOT RECAP USING BOTH HANDS!!!! This will constitute an automatic UNSATISFACTORY in clinical and prohibit completion of your skill validation). Label syringe if appropriate according to institutional policy.
7. Verify medication with MAR to ensure correct medication used. Replace vial to appropriate storage area (refrigerator, med dispense system, etc.) and proceed to patient’s room.
8. Introduce self and identify patient using two identifiers (name and date of birth). Explain procedure and perform hand hygiene.
9. Don gloves and provide for privacy.
10. Select appropriate site based on patient size and area of administration. (Thinly keratinized, lightly pigmented, hairless area):
 - a. Inner mid-forearm
 - b. Clavicular area of the chest or under clavicle
 - c. Scapular area of the back
11. Cleanse site with alcohol using a circular motion
12. Hold skin taut, insert needle bevel up (you should be able to see the outline of the needle under the skin) and slowly inject medication to form a wheal or bleb. Slowly withdraw needle. Instruct patient not to rub or scratch area.
13. Activate safety and discard syringe/needle into sharps box
14. Outline injection site with a skin marker. Inspect site in 24-72 hours.

SUBCUTANEOUS ADMINISTRATION

Subcutaneous Equipment:

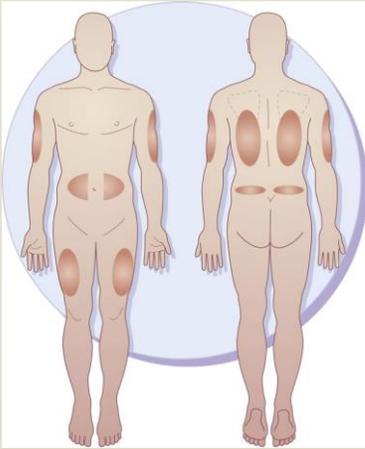
Syringe: 1-3 mL hypodermic or U-100 insulin syringe (INSULIN ONLY)

Needle Length: 3/8 – 1 inch

Needle Gauge: 25-30 gauge

Volume injected: 0.5 – 1 mL

Angle of insertion: 45-90 degrees



Mixing Insulin

Order: Give 25 Units of NPH and 10 Units of Regular Insulin

1. Calculate total amount of insulin to give (35 units). Roll vial of NPH, Swab the tops of both vials with an alcohol swab.
2. Draw up the amount of air equal to the amount of medication for the NPH (cloudy) into the syringe (25 units of air = 25 units of NPH).
3. Insert air into vial of NPH. DO NOT TOUCH the needle to the solution.
4. Draw up the amount of air equal to the amount of medication for the Regular (clear) into the syringe (10 units of air = 10 units of Regular).
5. Insert air into vial of Regular and invert the vial. Draw up the number of units of the regular insulin (10 units). Remove needle.
6. Insert needle into the NPH and pull up the number of units of insulin (25 units). The total amount of the solution will be 35 units.
7. Verify your dosage with another nurse.

1. Verify order, patient allergies, medical history and contraindications
2. Perform hand hygiene. Select correct syringe, needle gauge and length.
3. Select correct medication. Verify medication label with MAR.
4. Swab stopper of vial with alcohol. Pull up amount of air equal to amount of medication and instill air into vial.
5. Verify medication. Invert vial and syringe and draw up amount of medication ordered. Tap out any visible bubbles in syringe.
6. You may recap “clean” needle using the one-handed scoop. (DO NOT RECAP USING BOTH HANDS!!!! This will constitute an automatic UNSATISFACTORY in clinical and prohibit completion of your skill validation). Label syringe if appropriate according to institutional policy.
7. Verify medication with MAR to ensure correct medication used. Replace vial to appropriate storage area (refrigerator, med dispense system, etc.) and proceed to patient’s room.
8. Introduce self and identify patient using two identifiers (name and date of birth). Explain procedure and perform hand hygiene.
9. Don gloves and provide for privacy.
10. Select appropriate site based on patient size and area of administration. (Choose area where you have a large amount of adipose tissue):
 - a. Abdomen
 - b. Anterior thighs or upper outer thighs
 - c. Upper buttocks
 - d. Upper back
 - e. Upper arms
11. Cleanse site with alcohol using a circular motion
12. Pinch skin up, insert needle bevel up, slowly and purposefully inject medication into the tissue. DO NOT ASPIRATE. Release skin and withdraw needle.
13. Activate safety and discard syringe/needle into sharps box

INTRAMUSCULAR ADMINISTRATION

Intramuscular Equipment:

Syringe: 3-5mL Hypodermic

Needle length:

Adult: 5/8 – 1 ½ inch

Child: 5/8 - 1 ½ inch

Newborn: 5/8 inch

Needle gauge:

Adult: 18 (viscous meds) – 25 (22 for most meds)

Child: 25 – 27

Infant/Small Child: 25 -- 27

Volume injected:

Deltoid: 0.5 – 2 mL

Vastus Lateralis: 0.5 – 2 mL
(infant/child 1mL)

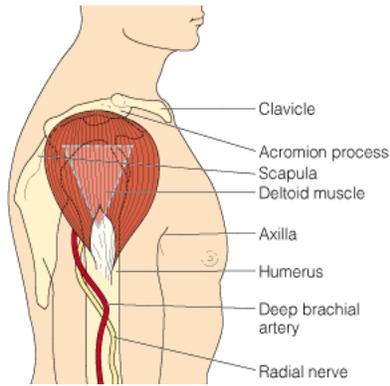
Ventrogluteal/Dorsogluteal:

1 – 4 mL

Angle of insertion: 90 degrees

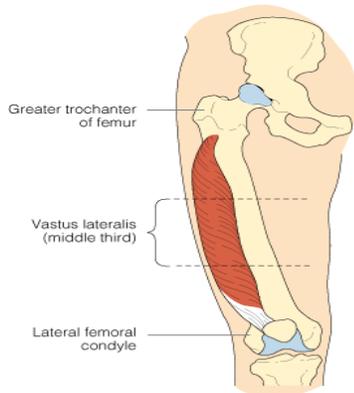
****ALWAYS ASPIRATE BEFORE
INJECTING MEDICATION****

1. Verify order, patient allergies, medical history and contraindications
2. Perform hand hygiene. Select correct syringe, needle gauge and length.
3. Select correct medication. Verify medication label with MAR.
4. Swab stopper of vial with alcohol. Pull up amount of air equal to amount of medication and instill air into vial.
5. Verify medication. Invert vial and syringe and draw up amount of medication ordered. Tap out any visible bubbles in syringe. Add 0.2mL airlock (optional).
6. You may recap “clean” needle using the one-handed scoop. (DO NOT RECAP USING BOTH HANDS!!!! This will constitute an automatic UNSATISFACTORY in clinical and prohibit completion of your skill validation). Label syringe if appropriate according to institutional policy.
7. Verify medication with MAR to ensure correct medication used. Replace vial to appropriate storage area (refrigerator, med dispense system, etc.) and proceed to patient’s room.
8. Introduce self and identify patient using two identifiers (name and date of birth). Explain procedure and perform hand hygiene.
9. Don gloves and provide for privacy.
10. Select appropriate site based on patient size, selected muscle, and medication to be given:
 - a. Deltoid
 - b. Vastus Lateralis
 - c. Ventrogluteal
 - d. Dorsogluteal (USE AS A LAST RESORT!!)
11. Cleanse site with alcohol using a circular motion
12. Depending on selected muscles you may pinch the muscle up (Deltoid, Vastus lateralis) or spread skin (Ventrogluteal/Dorsogluteal), insert needle bevel up, ASPIRATE and slowly inject medication. Withdraw needle and apply pressure at the site.
13. Activate safety and discard syringe/needle into sharps box



Deltoid Landmarks:

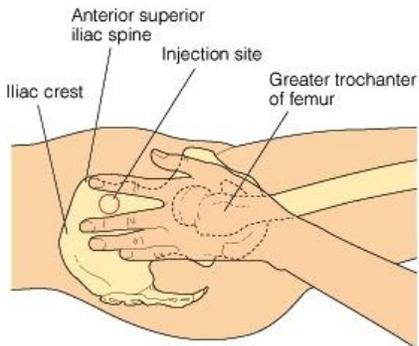
1. **Acromion Process** (marks top of deltoid)
2. Place your hand under **axilla**; thumb marks base of deltoid
3. Inject halfway between acromion process and deltoid



Vastus Lateralis Landmarks:

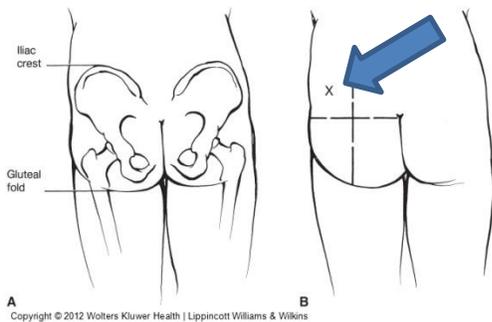
1. **Greater trochanter**
2. **Lateral femoral condyle**
3. Point thumbs toward each other
4. Divide into thirds
5. Inject in middle third in the **anteriolateral aspect of the leg**

Ventrogluteal injection site.



Ventrogluteal Landmarks:

1. Palm **greater trochanter**
2. Point thumb toward groin
3. Point index finger toward **anterior superior iliac spine (ASIS)**
4. Point middle finger toward **iliac crest**
5. Inject into "V". **MOVE YOUR HAND FIRST**



USE AS A LAST RESORT ONLY!!

Dorsogluteal Landmarks:

1. Locate **posterior iliac crest**
2. Locate **gluteal fold**
3. Draw a window horizontally and vertically
4. Administer in the upper outer quadrant