



## Instructions for Assessing the Injection Technique

Thank you for your willingness to assess the immunization technique of learners who have attended the APhA Immunization certificate program. This assessment is a vital part of their learning.

### General Instructions

- Watch the injection technique video found on the American Pharmacists Association's (APhA) website, <https://www.pharmacist.com/vaccine-administration-techniques>, specifically *APhA Injection Technique Video 2018*. The video running time is approximately 8 minutes. The techniques used in this video are what you will be assessing the learner. Please review this packet before assessing.
- Each learner must administer two IM injections and one SC injection into a friend and/or partner's arm
- The assessor must observe and evaluate all three learner's injections
  - If the assessor does not see an injection, it does not count and must be repeated
- Once all 3 injections are complete, the assessor will need to sign the injection technique assessment form and indicate whether the learner's technique is acceptable or the learner needs additional training.
  - If the learner needs additional training/practice before the assessor can mark the Injection Technique assessment as acceptable, the learner can try again at a time that is acceptable for the assessor. The learner can also contact their faculty for further guidance.
  - If assessing outside the classroom, the completed Injection Technique Assessment form will need to be forwarded to the contact / instructor of the course, for the learner to get further instructions to complete course and have access to their certificate.
- Supplies Needed

The learner will need to prepare their doses and demonstrate their injection techniques. The learner should have the following:

  - Normal saline
  - Alcohol swabs
  - At least three syringes with a 1- to 1½-inch needle for intramuscular (IM) injections - good to have an extra syringe
  - At least two syringe with a ⅝-inch needle for a subcutaneous (SC) injection - good to have an extra syringe
  - Access to a Sharps Container - if homemade, they will need to tell how they will dispose of the container after this activity
  - The required PPE as stated by state/organization. If there is no direction, use gloves and mask at a minimum.
  - Bandages - Consider barrier bandages (eliminates need for cotton balls and more bandages)
  - Cotton balls

If you have any questions, please contact:

Name of Coordinator / Instructor

Best way to reach:

Phone (notate if you accept texts on this phone)

Best time to reach

*The Assessment - Use the checklist below to assess the learner's technique*

Creates a clean and sterile work space and have all supplies ready to draw up their doses for injection, as well as to give the injections

Washed their hands or used hand sanitizer prior to preparing their doses for injection.

Draws up all three doses using appropriate technique as shown in the video before the technique assessment - as the assessor, you can give them a dose amount for them to draw up.

*Elements to evaluate for each injection administered:*

Selects the appropriate needle gauge and needle length for the route of administration

- 22 to 25 gauge for IM injections; 1 to 1½ inch for IM injections
- 23 to 25 gauge for SC injection; ½ inch for SC injection

Identifies an appropriate injection site:

- Deltoid for IM injections - Be sure they are not too high or too low
- Subcutaneous tissue in the outer aspect of the upper arm for SC injection

Uses the required PPE as stated by state/organization. If there is no direction, use gloves and mask at a minimum.

Prepares the injection site properly:

- Uses alcohol swab appropriately, allows injection site to dry completely (w/o blowing) before injecting

Holds the syringe appropriately

- Stabilizes the syringe by holding it near the hub of the needle

Stabilizes the patient during the injection.

Inserts the needle to the hub in one smooth, controlled motion.

Withdraws the needle in a smooth, controlled motion.

Activates the safety mechanism appropriately

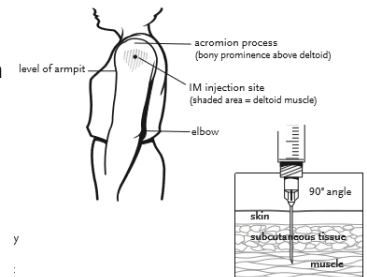
- Instruct learner how to activate the safety mechanism prior to the injection

Disposes of the needle in the sharps container **immediately**.

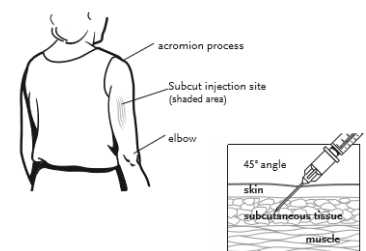
Provides appropriate injection site care.

Maintains a clean and sterile work space, including disposing of gloves.

Documents the injection appropriately



**Subcutaneous (Subcut) Injections**



Assessor

Notes:

If the coordinator / instructor needs to reach you:

Assessor's Name

Best way to reach

Phone (notate if you accept texts on this phone)

Best time to reach

I assessed:

Date Assessed

I assessed:

Date Assessed

# How to Administer Intramuscular and Subcutaneous Vaccine Injections to Adults

## Intramuscular (IM) Injections

### Administer these vaccines via IM route

- *Haemophilus influenzae* type b (Hib)
- Hepatitis A (HepA)
- Hepatitis B (HepB)
- Human papillomavirus (HPV)
- Influenza vaccine, injectable (IIV)
- Influenza vaccine, recombinant (RIV3; RIV4)
- Meningococcal conjugate (MenACWY)
- Meningococcal serogroup B (MenB)
- Pneumococcal conjugate (PCV13)
- Pneumococcal polysaccharide (PPSV23) – may also be given Subcut
- Polio (IPV) – may also be given Subcut
- Tetanus, diphtheria (Td), or with pertussis (Tdap)
- Zoster, recombinant (RZV; Shingrix)

### Injection site

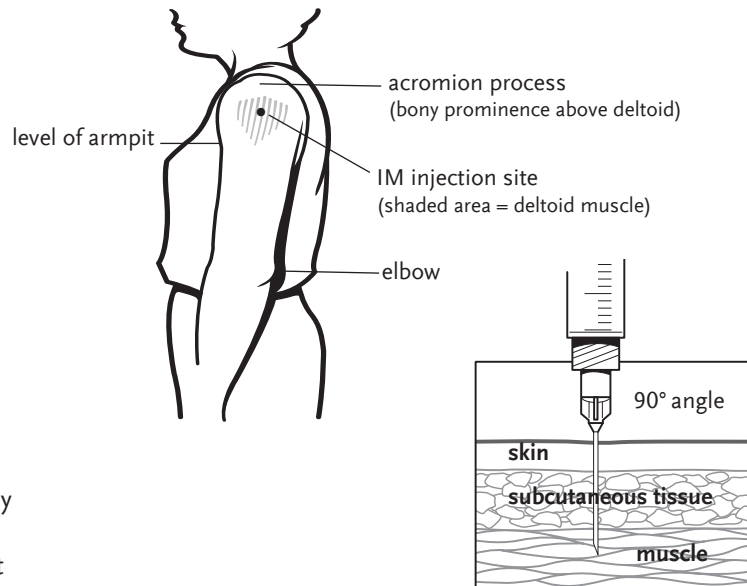
Give in the central and thickest portion of the deltoid muscle – above the level of the armpit and approximately 2–3 fingerbreadths (~2") below the acromion process. *See the diagram.* To avoid causing an injury, do not inject too high (near the acromion process) or too low.

### Needle size

22–25 gauge, 1–1½" needle (*see note at right*)

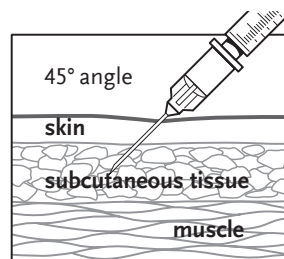
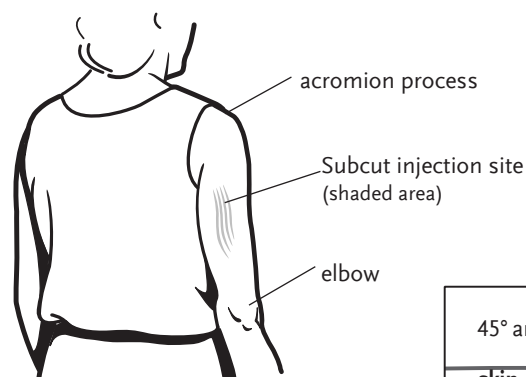
### Needle insertion

- Use a needle long enough to reach deep into the muscle.
- Insert the needle at a 90° angle to the skin with a quick thrust.
- Separate two injections given in the same deltoid muscle by a minimum of 1".



**Note:** A 5/8" needle is sufficient in adults weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle **only** if the subcutaneous tissue is not bunched and the injection is made at a 90° angle; a 1" needle is sufficient in adults weighing 130–152 lbs (60–70 kg); a 1–1½" needle is recommended in women weighing 153–200 lbs (70–90 kg) and men weighing 153–260 lbs (70–118 kg); a 1½" needle is recommended in women weighing more than 200 lbs (91 kg) or men weighing more than 260 lbs (more than 118 kg).

## Subcutaneous (Subcut) Injections



### Administer these vaccines via Subcut route

- Measles, mumps, rubella (MMR)
- Pneumococcal polysaccharide (PPSV23) – may also be given IM
- Polio (IPV) – may also be given IM
- Varicella (Var; chickenpox)
- Zoster, live (ZVL; Zostavax)

### Injection site

Give in fatty tissue over the triceps. *See the diagram.*

### Needle size

23–25 gauge, 5/8" needle

### Needle insertion

- Pinch up on the tissue to prevent injection into the muscle. Insert the needle at a 45° angle to the skin.
- Separate two injections given in the same area of fatty tissue by a minimum of 1".

# YOU CALL THE SHOTS

**Shoulder injuries related to vaccine administration**  
Improper vaccine administration could result in shoulder injuries such as shoulder bursitis and tendinitis.

**Make sure vaccination is safe.**

## KNOW THE SITE. GET IT RIGHT!

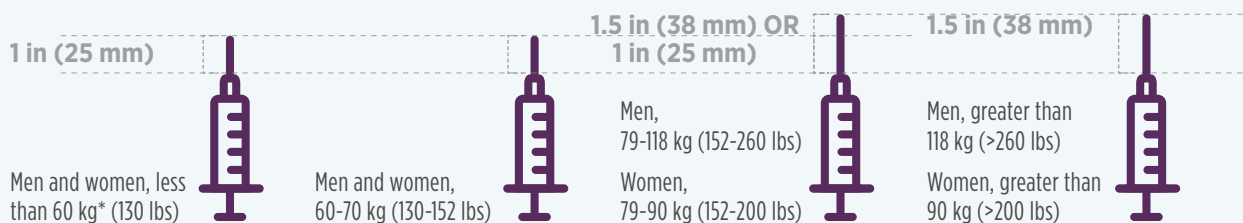
When administering vaccine by an intramuscular (IM) injection to an adult:



### Use the correct syringe and needle

- » Vaccine may be administered using either a 1-mL or 3-mL syringe
- » Use a 22 to 25 gauge needle
- » Use the correct needle size based on your patient's size

#### Injection site: Deltoid muscle of upper arm

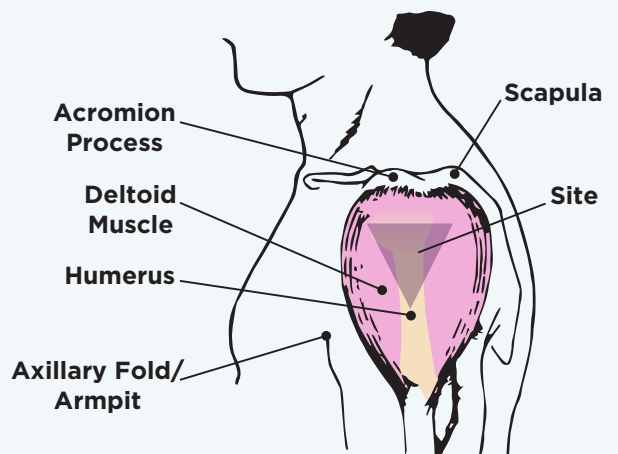


\*Some experts recommend a 5/8-inch needle for men and women who weigh less than 60 kg (130 lbs).



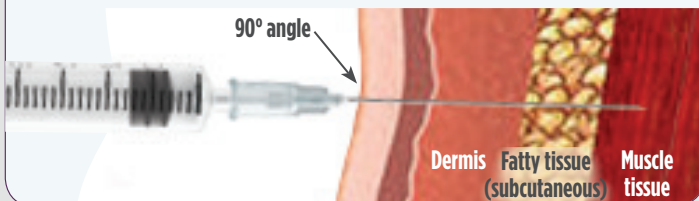
### Identify the injection site

- » Locate the deltoid muscle of the upper arm
- » Use anatomical landmarks to determine the injection site
- » In adults, the midpoint of the deltoid is about 2 inches (or 2 to 3 fingers' breadth) below the acromion process (bony prominence) and above the armpit in the middle of the upper arm



### Administer the vaccine correctly

- » Inject the vaccine into the middle and thickest part of the deltoid muscle
- » Insert the needle at a 90° angle and inject all of the vaccine into the muscle tissue



### IM injection best practices

- » Administering the injection too high on the upper arm may cause shoulder injury
- » If administering additional vaccines into the same arm, separate the injection sites by 1 inch if possible



### Always follow safe injection practices

- » Maintain aseptic technique
- » Perform hand hygiene before preparing and administering vaccines
- » Use a new needle and new syringe for each injection
- » If using a single-dose vial (SDV) discard after use

*A SDV should be used for one patient only!*

Report any clinically significant adverse event after vaccination to the Vaccine Adverse Event Reporting System (VAERS) at [vaers.hhs.gov/](https://vaers.hhs.gov/)

For additional information on proper vaccine administration, visit the CDC vaccine administration web page at [www.cdc.gov/vaccines/hcp/admin/admin-protocols.html](https://www.cdc.gov/vaccines/hcp/admin/admin-protocols.html)