



## Instructors Skills Support for Practice of Administering an Intermuscular (IM) injection in the Deltoid Muscle

Some of these instructions or the sequencing may be different in various locations depending on local practice guidelines and the setting where the vaccination session occurs.

You may want to adjust the **Skills Checklist for Vaccine Administration** according to your local specific practice/administration guidelines (*note: a copy of the Skills Checklist is included at the end of this paper*). In some sites, patients will pass through many stations (eligibility/registration, waiting room, medical screening) before they reach the actual vaccination station, while in other situations, where there may be only two people providing vaccination services, you may set up only a few stations.

After you have reviewed the Vaccination Module and videos with students and responded to student questions, set up a mock vaccination area/site that will be similar to what students will see in the field. If there will be many stations, have students rotate through each station, from registration/eligibility, medical screening, vaccination, to observation.

**Step 1.** Have students set up the vaccination site by designating each patient area according to your local delivery procedures and identifying all your equipment that will be needed including any monitoring and reporting documents.

A **potential** list of equipment **depending on your local guidelines** can include:

- Masks
- Non-sterile gloves
- Apron
- Face shield
- Equipment tray
- Syringes
- Needles (21–23 gauge): a standard length is 25mm
- Alcohol wipe (70% isopropyl)
- Gauze or cotton swab
- Sharps container
- Biohazard bag for infectious waste and PPE
- Vials of vaccine
- Any instructional materials accompanying the vaccine identifying dose, reporting documents and AEFI kits
- Oranges (for injection practice)

**Step 2. Establish a place for washing hands and to don and remove PPE.**

**Step 3.** Have students introduce themselves to the patient including their **name** and their role in the vaccination process. They should confirm the patient's **name** and **date of birth**. Students should then:

- Briefly **explain** what the procedure will involve using **patient-friendly language**: *“Today I need to administer the vaccine and I will be using your deltoid muscle in your upper arm. You may briefly experience a sharp scratch as the needle is inserted. You may feel pain at the site, a redness or slight swelling for a day or two. After the injection we would like you to wait for 15 minutes in the observation area to make sure you have no side effects.”*
- Check the patient's **understanding** of the **vaccination** being administered.
- If patients have not already had a **medical screening for contraindications** (a health reason or other reason that a shot should not be administered) at another station, perform the medical screening now.
- **Gain consent** to proceed with the intramuscular injection.
- Adequately **expose** the deltoid injection site for the procedure and **position** the patient so that they are sitting comfortably with arm resting in their lap or on a table in a **sideways position** from the vaccinator.

Have students make the final checks before medication administration.

- **Right person:** Ask the patient to confirm their name and birthdate and compare to your data collection report.
- **Right drug:** Check the labelled vaccine against the order making sure the drug is not expired, that VVM if available is good and that the drug is free of particulate.
- **Right dose:** Check the drug dose against the prescription to ensure that it is correct.
- **Right time:** If the vaccine requires two doses you will need to record the first dose and write down the date when the second dose is due for both the patient and your monitoring records. Each patient receiving a vaccine should be given a card with the vaccine and lot number and if necessary when to come back for a second dose.


Once all of the above have been confirmed have the student **prepare the medication using aseptic technique following the Skills Checklist for Vaccine Administration**.

For practice, a convenient object often used to mimic vaccinations can be an orange.

Students should be encouraged to practice the procedure until they pass all activities. An atmosphere and attitude that encourages students to master the skill creates confidence for the student and supports better student outcomes for success and better patient outcomes

**\*Aspiration:** It has been common practice to draw back on a syringe after the needle is inserted to check whether it is in a blood vessel. While it is important to aspirate if the dorsogluteal muscle site is used – because of proximity to the gluteal artery – it is not required for other IM injection sites (Malkin, Bridget, 2008, “Are techniques used for intramuscular injections based on research evidence?”

Skill	<p style="text-align: center;"><b>SKILLS CHECKLIST FOR VACCINE ADMINISTRATION</b></p> 	Need to Improve	Pass
Patient Greeting	Greet patient, explain procedure, type of vaccine and reason for administering. Ask if they have any questions.		
Wash Hands	Perform proper handwashing and uses PPE required by protocol. A mask and sometimes gloves are usually used for COVID vaccination.		
Screening	Ask if any previous adverse effects from injections, oral medicines or if they have severe allergies to specific foods.		
Gather Supplies	Check that alcohol wipe, sterile 2x2 gauze pad, or band aid, needle and syringe in the correct size, sharps container available and close by for disposal of syringe and needle.		
Clean Area	Make sure the area where you are preparing vaccine and administering injection is clean and free of other unnecessary objects.		
Obtain Vaccine	Remove vaccine from storage, check medication, expiration date, clarity of fluid, check to see if single dose or multi dose vial.		
Prepare Vial	Remove the top of the vial, wipe with alcohol, let dry. Check needle and syringe package for expiration or tears in package.		
Prepare Syringe	Open syringe and needle and remove needle cap. With vial set on table insert needle into top of vial through rubber top.		
Withdraw Vaccine	Bring the vial with syringe to eye level, and with tip of needle below fluid level withdraw the <b>correct amount of fluid for one dose.</b>		
Check Syringe	Withdraw needle, check for air at tip of syringe. If air bubbles present, flick with finger to remove.		
Check	Recheck vaccine label and dose against amount in syringe.		
Identify Site	Position patient seated if possible, with arm free of clothing up to shoulder. Identify deltoid (two fingers down from olecranon process). Identify injection site and swap with 70% alcohol wipe and let dry.		
Injection	Place fingers of non-dominant hand on either side of injection site. Insert needle at 90-degree angle, slowly inject vaccine. Remove needle, dispose in sharps container and observe for any blood at injection site. If any blood cover with band-aid.		
Observation	Have patient wait 15 minutes for observation of any adverse effects. If necessary, remind patient about the need for a second vaccination		

Skill	<p style="text-align: center;"><b>SKILLS CHECKLIST FOR VACCINE ADMINISTRATION</b></p> 	Need to Improve	Pass
Document	Document the vaccine type and lot number and patient name. The patient may receive a card with the information.		
If Diluent Required	Remove diluent, check clarity, expiration date, wipe top with 70% alcohol. With diluent flat on table, pierce rubber top with needle.		
Diluent Added to Vaccine	Bring diluent with syringe to eye level and withdraw appropriate amount of fluid. Inject fluid into vaccine vial while it is flat on table. Rotate vaccine vial to mix and check that fluid is clear.		