

# LANCASHIRE & SOUTH CUMBRIA PRIMARY CARE TRAINING HUB

## Clinical Education Session Handbook

# Injection Technique



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## Introduction

Intramuscular injection, often abbreviated IM, is the injection of a substance into a muscle. It is one of several methods for administration of medications. Intramuscular injection may be preferred because of the larger, deeper muscle mass, leading to faster absorption than subcutaneous or intradermal injections.

Injection technique, choice of needle length and gauge (diameter), and injection site are all important considerations.

Vaccines mostly, should be given by intramuscular (IM) injection. Injections given intramuscularly, rather than deep subcutaneously, are less likely to cause local reactions.

## Equipment Required

Equipment for venepuncture should include:

- PPE
- Handwashing facilities
- Clinell Wipes (or alternative for wiping down surfaces)
- Sharps bin
- Clinical Waste bin
- Injection Pad
- Cotton swabs
- Syringe
- Choice of needle – blue / green / orange



## Things to Consider

### How do I prepare for drug administration via injection method?

Health care practitioners need to consider:

- Quality assurance
  - Considerations to education and training.
  - Include an understanding of anatomy, awareness of the risks from blood exposure, and the consequences of poor infection prevention and control.
  - Not administering any products unless they are competent to do so.
  - Identifying any personal training needs
  - Completing all training required, and attending regular updates.
  - Keeping up to date with changes and current best practice
  - Monitoring their own practice
  - Standard Operating Procedures - SOPs are required for each step or procedure. They should be written and be readily available to health workers.
  - Correct Identification of the patient - For drug administration it is essential practice to ensure the drug is administered correctly – consider the 8 Rs –
    - Right patient
    - Right drug
    - Right to give (no contraindications/ rationale)
    - Right time
    - Right dose
    - Right route
    - Right site
    - Right documentation
  - Understand the principles of safe and effective administration and optimisation of medicines in accordance with local and national policies.
  - demonstrate the ability to recognise the effects of medicines, allergies, drug sensitivity, side effects, contraindications, and adverse reactions.
  - Incident Reporting - A system is required for reporting all adverse events. A logbook or register should be established with accurate details of the incident, possible causes and management of adverse events
  - Ensuring the documentation/paperwork is completed correctly – good record keeping.

Think about your environment....

Review the consulting room where procedure takes place. Consider the layout and location of rooms to ensure there is a confidential quiet, clean, private area that is welcoming.

Make sure all your equipment is ready at hand before you start and make sure you will not be disturbed.

Adhere to Infection control Policy.

Ensure you have the correct waste disposal close by, i.e. – clinical waste / sharps bin.

Good lighting is available in the area.

How can I make sure the patient is ready?

- Welcome the patient when they arrive and introduce yourself.
- The patient should be put at ease from the start, welcoming them is an important part of this.
- You should check name, date of birth and address to make sure they are correct.
- It is important that the patient understands what you are going to do in the procedure and what to expect; including potential side effects/ adverse side effects and what to do in the case of these.
- Before proceeding you should be confident that the patient is fully informed and is therefore able to consent to the process.
- You need to ensure you have the correct authorisation prior to administering medicine i.e., PGD/ PSD or National Protocol.
- 

Patients with specific needs or disabilities

It is important to consider specific needs in relation to drug administration.

These reasons may include:

- disability (physical or mental) and the patients' physical limitations
- language barriers and cultural beliefs

Language and cultural differences can affect understanding or the screening process. It is important to take measures to ensure all patients understand the purpose of the procedure for taking the sample. Language translation services are available. Primary care is responsible for sourcing and offering language support if needed.

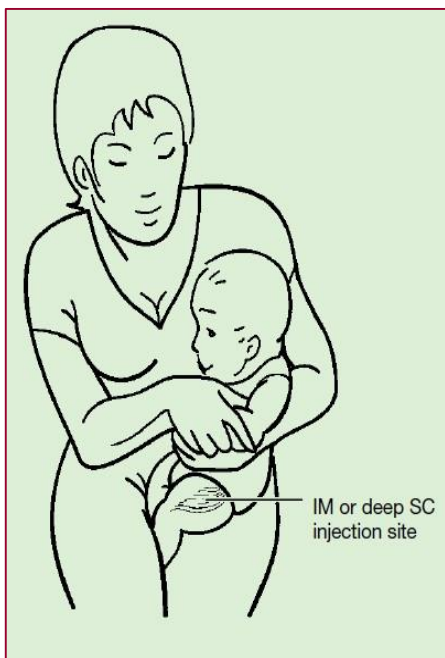
- the need for assistance and seeking specialist advice if necessary

## Let's get Practical!

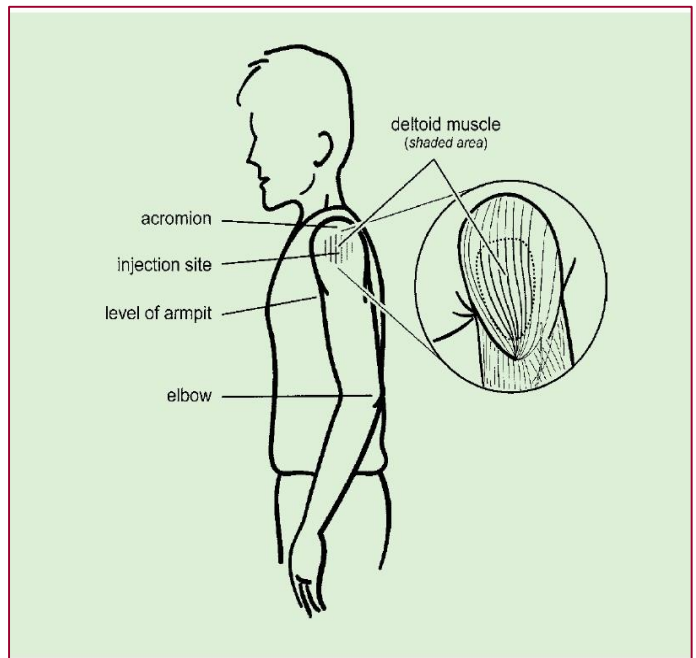
- Welcome
- Check identity
- Explain the procedure fully – explain that the injection may feel uncomfortable.
- Answer any questions relating to the procedure
- Gain informed consent

## Injection Technique

- Perform [hand hygiene](#).

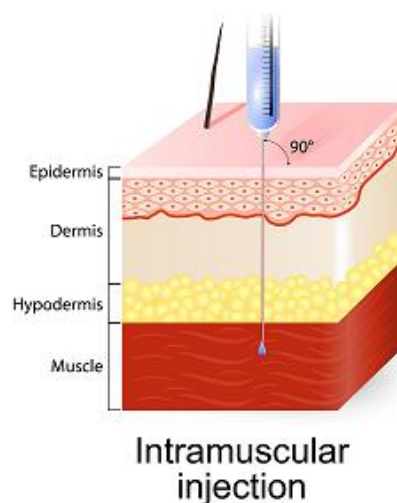


Be sure to choose the appropriate site for administration and be clear with patients / parents about



- Communicate clearly with the patient/parent/carer about the process and their role
- Select the injection site and adequately expose the planned injection site for the procedure
- Position the patient so that they are sitting comfortably / Check that if administering to youngsters that children/babies are securely held to allow multiple vaccines to be given in the shortest time frame to limit distress
- Be confident and gently place traction on the skin with your non-dominant hand away from the injection site.

- Warn the patient of a sharp scratch.
- Holding the syringe like a dart in your dominant hand, pierce the skin at a 75-90° angle. Insert the needle quickly and firmly, with the bevel facing upwards, leaving approximately one-third of the shaft exposed (however this varies between sites and patients).
- There is no need to aspirate (draw back) once the needle is in the muscle.
- Slowly but with purpose inject the medicine by depressing the plunger on the syringe.
- Remove the needle and immediately dispose of it into a sharps container.
- Release the traction you were applying to the skin.
- Apply gentle pressure over the injection site with a cotton swab or gauze and avoid rubbing the site.
- Replace the gauze with a plaster if required.
- Dispose of your used clinical equipment into an appropriate clinical waste bin.
- Inform the patient when the procedure is over.



Credit: Designua/Shutterstock.com

## Needlestick Injury

Note - Best practice is to wear non-sterile disposable gloves, nitrile or latex, when undertaking venepuncture. The wearing of gloves has been shown to reduce the volume of blood transferred in a needlestick injury by 52% compared with not wearing gloves, which can help reduce the risk of acquiring a blood-borne virus (BBV) if you sustain a needlestick injury.

### Immediate management of sharps injuries

- Bleed it - if there has been a puncture wound, encourage bleeding of the wound by squeezing it under running water (do not suck the wound).
- Wash it - the injured area or damaged skin should be washed thoroughly with liquid soap and warm running water and dried. Blood or body fluid splashes to the eyes, nose or mouth should be irrigated copiously with water
- Cover it - cover the wound with a waterproof dressing.
- Report it - report the injury to your manager immediately and complete an incident form.
- Seek advice - seek urgent clinical advice immediately, e.g., from your GP, Advance Nurse Practitioner, Occupational Health provider. Out of normal office/surgery hours, attend the nearest Emergency Department (ED).



## Top Tips

- Be calm and confident
- One of the essential markers of quality of care is the involvement and cooperation of the patient; this is mutually beneficial to both the health worker and the patient.
- Check for any previous problems with drug administration/ injections
- Use the 8Rs
- Try to relax the patient as much as possible – the more relaxed the muscle being injected to is – the less painful it will be!
- If giving vaccines for example and more than 1 in the same limb where it is not possible to give at an alternate site - leave 2.5 cm between vaccines and accurately record where each was given.
- Do NOT use a site that is scarred, inflamed, irritated, or bruised.
- When administering, the site does not need to be routinely cleaned prior to injection unless the skin is visibly soiled
- Seek help from a colleague if in doubt



**Clinical Education Session**

**Learners Toolkit**

# **IM Injection Technique**

**Name:**

**Date:**



## Evaluation of Learning and Assessment form:

Pre-clinical educations session – what are my learning needs?
Factors that have enabled me to learn & what areas have I found most useful:
Areas still to learn more about & action plan going forward with time scales and who may be able to help.
What did I enjoy most about the clinical education session?
Useful Resources:

## Let's think about it ... Do you...

<p>Know the correct indication for the drug administration?</p> <ul style="list-style-type: none"> <li>- Identify the indications and contraindications for both the practitioner and the patient</li> <li>- Know what authorisation you can have to enable you to administer the drug.</li> </ul>	
<p>Check patient details, gain consent &amp; document accordingly?</p>	
<p>Prepare the examination room and prepare the equipment required for drug administration?</p> <ul style="list-style-type: none"> <li>-Including awareness of needlestick injury and sharps disposal.</li> </ul>	
<p>Explain the procedure to be undertaken?</p>	
<p>Know the 8 Rs relevant to drug administration?</p>	
<p>Keep good records?</p>	
<p>Reflect on communication with the patient?</p>	
<p>Reflect on the patients view of the procedure?</p>	
<p>Reflect on your view of the procedure?</p>	
<p>What can you learn from these reflections?</p>	

## Resources

[Home - Royal Marsden Manual \(rmmonline.co.uk\)](http://rmmonline.co.uk)

The Royal Marsden Manual of Clinical Nursing Procedures.

[Lancashire and South Cumbria Integrated Care Board: Right Person, Right Care \(icb.nhs.uk\)](http://icb.nhs.uk)

Local Services L & SC.

[Clinical topic guides \(rcgp.org.uk\)](http://rcgp.org.uk)

The Royal College of General Practitioners.

[Home - eLearning for healthcare \(e-lfh.org.uk\)](http://e-lfh.org.uk)

Online modules available at e-learning for health

<https://www.infectionpreventioncontrol.co.uk/resources/safe-management-of-sharps-and-inoculation-injuries-general-practice/>

[009-018.pdf](#)

RCN – Medicines Management – An overview for nursing.

[Injection techniques | Nursing Times](#)

[Intramuscular Injection \(IM\) - OSCE Guide | IM Injection | Geeky Medics](#)

[Green-Book-Chapter-4.pdf \(publishing.service.gov.uk\)](#)