



# **Intramuscular Injections Guidance Notes**

### **Intramuscular Injections**

## Summary of identified best practice technique:

- 1. Assess client for appropriate needle length 23g -32 mm or 21g- 38mm (the needle should penetrate into deep muscle tissue.)
- 2. If needle has gone through a "bung" while drawing up the medication, use a new needle to administer medication to client
- 3. Preferred sites:
  - a. **Deltoid** (max volume 1ml) .When using the Deltoid, ask the client to relax their arm at the side and flex the elbow.
  - b. **Ventrogluteal** (Max volume 2.5ml) Place the client in the prone position. Ask the client to relax with the toes pointing inward
  - c. **Vastus Lateralis** (Max volume 5ml) ask the client to relax the muscle (this site is acceptable to use where this has been routine practice and all precautions are taken regarding anatomical markers
  - d. **Dorso gluteal** (this site has lowest absorption rate) is acceptable to use where this has been routine practice and all precautions are taken with regards to anatomical markers
- 4. Use the Z-track technique (for Iron injections) prevents irritation, leakage and staining of medication into the subcutaneous tissue (See Z Track administration method later in this document)

All medication intended for IM administration should be administered to the appropriate site according to the manufacturer's instructions.

It is recommended that solutions for IM injections be prepared immediately before use. (POAC, 2007).





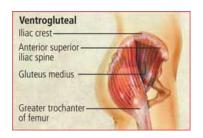
# **Intramuscular Injections Site Maps**

#### Ventrogluteal

Client may lie on their side, prone or supine.

Ask client to flex leg of injection side to relax muscle.

To locate the ventrogluteal site place the palm of the hand on the greater trochanter. Extend the index finger to touch the anterior superior iliac crest and stretch the middle finger to form a 'V' as far as possible along the iliac crest. The injection site is the centre of the triangle formed by the index finger, the third finger and the crest of the ilium.





#### **Vastus Lateralus**

As there are a number of small nerve endings in this area, the client may find this site more painful.

To locate the Vastus Lateralis site, palpate the greater trochanter of the femur and the lateral femoral condyle, and then divide the area between into thirds. The injection is given at the junction of the middle and upper thirds which in adults is approximately one hand span from the greater trochanter



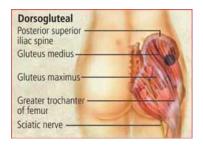


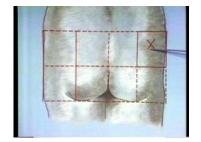


### Dorsogluteal

To locate the Dorsogluteal site, palpate the posterior superior iliac spine, and then draw an imaginary line to the greater trochanter of the femur. The injection site is then lateral and superior to this line.

*Important Practice Point:* The sciatic nerve and superior gluteal artery lie only a few centimetres distal to the injection site





#### **Deltoid**

Should not be used for volumes greater than 1ml

To locate the deltoid site, palpate the acromion process and the midpoint on the lateral aspect of the arm that is in line with the axilla). Draw an inverted triangle within these boundaries and the injection site is in the middle of the triangle. In adults, this is approximately three to four finger widths from the acromion process. This site should **not** be used if the person is very thin or the muscle is very small.



