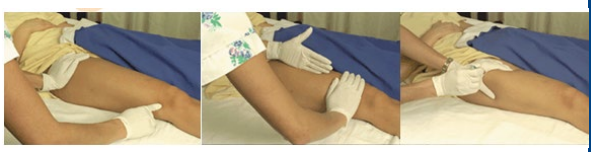
Centre for Prehospital Care
Health Sciences North

MEDICATION ADMINISTRATION-INTRAMUSCULAR (IM) INJECTION

Document Owner: C. Sohm	**Program/Service Area**: Centre for Prehospital Care	**Issue Date:** September 2010
Review Date: September 2024	**Revision Date**: September 2024	
Approval: Corey Petrie, Interim Regional Manager, Centre for Prehospital Care & Trauma Services	**Frequency:** In accordance with the Medical Directive that requires administration of a medication by intramuscular injection	
Signature:		

Purpose: To ensure a consistent standardized practice for administering medications via intramuscular injection.

	Content	Details
1.	Ensure the patient qualifies for the appropriate medical directive, or contact a Base Hospital Physician (BHP) for further direction.	
2.	Communicate the need for the medication, and its effects to the patient and/or family member and obtain consent whenever possible.	
3.	Check medication for proper labeling and the expiry date is after the administraton date.	All commonly used multi-dose vials of injectable medication in solution will be given an expiry of 30 days from the date of initial opening, unless the manufacturer specifies a different date.
4.	Refer to the medical directive for prescribed dosage(s). Perform a medication cross check with your partner (if available)	
5.	Obtain the required equipment. • Dosages less than 1 mL should be drawn with a 1 mL syringe for increased accuracy • Dosages of 1 mL should be done with a 3 mL syringe to simplify the drawing/zeroing process. Recommended needle sizes are: • Adult: 2.5 cm-3.8 cm (1”-1.5”) length and 22-25 gauge. • Pediatric: 2.2-2.5 cm (⅞” - 1”) length and 22-25 gauge	For the administration of Glucagon, follow the package instructions for preparation but utilize the most appropriate sized IM needle and syringe for injection.
6.	Preferred site is the deltoid muscle for patients ≥ 12 months. Avoid areas with bruising, edema, masses, tenderness or discoloration when possible. Select a site that has not recently been used. Palpate the acromion process and landmark 2.5 - 5.0 cm below.	Recommended deltoid Injection volume is 0.5 to 3 ml. If the patient requires more than 3 ml of medication prepare another injection site or utilize the vastus lateralis which can hold a max of 5 mls.
7.	For patients < 12 months age and/or emaciated patients with under developed deltoid muscles, inject the medication into the vastus lateralis muscle of the thigh. Landmark by placing one hand below the greater trochanter and one hand above the knee. The space between the two hands and slightly on the lateral side defines the vastus	

	lateralis muscle. The IM injection should be made in the middle third of that space.	
8.	Cleanse the area with an alcohol swab, wiping with firm pressure from injection site outward in a circular motion.	Allow the skin to dry.
9.	Hold the syringe between the thumb and forefinger of dominant hand. Pull cover straight off the needle with non-dominant hand.	
10.	Using the Z-track method, apply slight pressure to the skin while pulling laterally away from the injection site until the dermis is taught over injection site.	
11.	Insert the needle swiftly at a 90-degree angle using a dart like motion to ensure insertion well into the muscle layer.	
12.	Inject the medication slowly until the entire dose is administered.	
13.	After the injection, withdraw the needle at the same angle it was inserted. Release your hold on the skin and tissue and apply pressure to the site with a piece of gauze.	Releasing your hold on the skin and tissue disrupts the hole that the needle left in the tissues and prevents the medication from leaking out. Do not massage the site following an intramuscular injection. This may force medication from the muscle into the skin layers and reduce the absorption of the drug.
14.	Discard the needle in the sharps container without recapping.	
15.	Assess the patient closely for any change in condition following medication administration and document any adverse effects.	
16.	Discontinue further medication administration if adverse effects occur and/or as directed by a BHP.	
17.	Document the procedure on the Ambulance Call Report as per the MoH Ambulance Documentation Standards and your Service Provider's policy	This must include: • name of the medication • dose and concentration of the medication • time of administration • route/site of administration • amount of wastage for any controlled substance accompanied by a co-signature • patient condition before and after medication administration

Expected Outcome: To safely administer medication via intramuscular injection.