

MEDICATION ADMINISTRATION-INTRAMUSCULAR (IM) INJECTION Document Owner: C. Sohm Revision Date: November 2023 Approval: Corey Petrie, Interim Regional Manager, Centre for Prehospital Care & Trauma Services Frequency: As Required in accordance with any 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 that 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 for an expiry date.	
4.	Refer to medical directive for correct dosage(s).	
5.	Obtain the required equipment. Dosages of less than 1 mL should be drawn with a 1 mL syringe for increased accuracy Dosages of exactly 1 mL should be done with a 3 mL syringe to simplify the drawing/zeroing process.	For the administration of Glucagon, follow the package instructions for preparation but utilize the most appropriate sized IM needle and syringe for injection.
	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 (¾" - 1") length and 22-25 gauge	
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 at a 90-degree angle in one quick motion to ensure insertion in the muscle layer. Avoid inserting the needle all the way to the hub.	
12.	Inject the medication slowly over 5-10 seconds.	
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 when using the Z-track method.
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 all medication administration on the patient care record as per the Ministry of Health and Long Term Care Emergency Health Services Branch Ambulance Call Report Documentation Standards and your Service Provider 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 cosignature patient condition before and after medication administration

Expected Outcome: To safely administer medication via intramuscular injection.