INTRANASAL MEDICATION ADMINISTRATION – BLS/ALS

**INDICATIONS**
- Naloxone (BLS/ALS)
- Glucagon (ALS)
- Midazolam (ALS)
- Fentanyl (ALS)

**CONTRAINDICATIONS**
- Nasal trauma

**EQUIPMENT**
- Medication from vial or prefilled syringe (glucagon kit requires reconstitution)
- Mucosal Atomizer Device (MAD)
- Syringe
- Needle
- Alcohol swab
- Sterile gauze

**PROCEDURE**
1. Apply personal protective equipment: gloves.
2. Check the five rights of medication administration.
   a. Right patient
   b. Right medication
   c. Right dosage/concentration
   d. Right time
   e. Right route
3. Clean vial with alcohol swab or prepare prefilled syringe.
4. Assemble needle and syringe while maintaining sterility.
5. Draw appropriate amount of medication into syringe or reconstitute glucagon (see below for glucagon reconstitution instructions).
6. Reaffirm medication with Medication Administration Cross Check (MACC).
7. Expel air from syringe
8. Remove needle and attach MAD to syringe
9. Dispose of needle into appropriate sharps container.

**Glucagon Reconstitution Instructions**

**Procedure**

1. Add 1.5 mL of sterile water to the 1 mL glucagon vial (1 mg/mL).
2. Swirl the vial gently to ensure the glucagon is completely dissolved.
3. Inhale the glucagon mixture through the MAD.
4. Dispose of the vial and medication appropriately.

**Note:** Always follow local and institutional guidelines for medication administration and disposal.
10. Inspect nostrils to determine the largest and least deviated or obstructed nostril.

11. Insert tip of MAD into nostril.

12. Briskly depress the syringe plunger (1 ml max per nostril; give ½ the volume in each nostril).

13. Dispose of syringe and MAD into proper container.


15. Document the medication dose and clinical response.

Glucagon reconstitution

Step 1. Using your thumb, flip the orange plastic cap off the GlucaGen® vial.

Step 2. Pick up the prefilled syringe containing sterile water. Hold the syringe with 1 hand and with your other hand, pull the needle cover off the syringe. Do not remove the plastic backstop from the syringe.

Step 3. Pick up the GlucaGen® vial. Hold the vial of dry powder with 1 hand and with your other hand, push the needle of the prefilled syringe through the center of the rubber stopper.

Step 4. Hold the vial and syringe together, with the needle still inserted into the vial. Carefully turn the vial and syringe together right side up. Slowly push the plunger down until the syringe is empty. Do not take the syringe out of the vial.

Step 5. Hold the entire unit (the vial and syringe) in one hand and gently shake the vial until the powder is completely dissolved. Do not use if a gel has formed, or if you see particles in the solution. Do not take the syringe out of the vial.

Step 6. Firmly hold the vial and syringe together, with the needle still inserted into the vial. Carefully turn the vial and syringe together upside down. Gently pull down on the plunger and slowly withdraw all of the liquid into the syringe. Do not pull the plunger out of the syringe.

Step 7. Keep the needle inside the vial. Check the syringe for air bubbles. If you see bubbles, tap the syringe until the bubbles rise to the top of the syringe. Gently push on the plunger to move only the air bubbles back into the vial.

Step 8. Hold the vial and syringe as shown.

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1 Referenced from [https://www.glucagenhypokit.com/instructions.html](https://www.glucagenhypokit.com/instructions.html)