

Initial Date: 07/19/2023  
Revised Date: 03/03/2025

Section: 9-25R

## **Glucagon**

**Pharmacological Category:** Antidote; Hypoglycemia

**Routes:** IM – injectable formulation or IN – intranasal formulation

**Indications:**

1. Unable to obtain IV access and dextrose is indicated

**Contraindications:**

1. Adrenal gland tumor

**Expected effects:**

1. Increased blood glucose

**Side effects:**

1. Nausea
2. Vomiting

**NOTE:**

1. Use ONLY intranasal formulation for IN administration
2. Use ONLY injectable formulation for IM administration

**Dosing: ADULT ALTERED MENTAL STATUS**

Indication: Patient is demonstrating signs of hypoglycemia, blood glucose is < 60 mg/dL and unable to start IV.

Adults administer:

1. Glucagon 1 mg IM (injectable formulation) OR 3 mg IN (intranasal formulation)

**Dosing: ADULT SEIZURE**

Indication: Seizure patient with blood glucose < 60 mg/dL and unable to start IV.

Adults administer:

1. Glucagon 1 mg IM (injectable formulation) OR 3 mg IN (intranasal formulation)

**Dosing: PEDS ALTERED MENTAL STATUS**

Indication: Pediatric patient demonstrating signs of hypoglycemia, unable to start IV and blood glucose is <60 mg/dL

Pediatrics administer:

1. Glucagon according to MI MEDIC
2. If MI MEDIC is not available administer:
  - a. Pediatrics age 5 or greater:
    - i. Glucagon 1 mg IM (injectable formulation)
    - ii. Glucagon 3 mg IN (intranasal formulation)

Initial Date: 07/19/2023  
Revised Date: 03/03/2025

Section: 9-25R

- b. Pediatrics less than age 5:
  - i. Glucagon 0.5 mg IM (injectable formulation)
  - ii. Glucagon IN DO NOT ADMINISTER

**Dosing: PEDS SEIZURE**

Indication: Pediatric seizure patient, unable to start IV, and blood glucose is <60 mg/dL:

Pediatrics administer:

1. Glucagon according to MI MEDIC
2. If MI MEDIC is not available administer:
  - a. Pediatrics age 5 or greater:
    - i. Glucagon 1 mg IM (injectable formulation)
    - ii. Glucagon 3 mg IN (intranasal formulation)
  - b. Pediatrics less than age 5:
    - i. Glucagon 0.5 mg IM (injectable formulation)
    - ii. Glucagon IN DO NOT ADMINISTER

Used in the Following Protocols

Altered Mental Status (Section 3 Adult Treatment)

Seizures (Section 3 Adult Treatment)

Pediatric Altered Mental Status (Section 4 Obstetrics and Pediatrics)

Pediatric Seizures (Section 4 Obstetrics and Pediatrics)