

## GLUCAGON (generic)

**ACTION:** Antihypoglycemic; converts stored liver glycogen to glucose, resulting in ↑ circulating blood sugar

**INDICATIONS:**

1. Suspected or known hypoglycemia (BS < 80 mg/dL) in diabetic patients, if symptomatic and IV cannot be established.
2. Beta blocker overdose or toxicity; including: acebutolol (Sectral), alprenolol, atenolol (Tenormin), betaxolol (Betoptic, Kerlone), bevantolol, bisoprolol, carteolol (Cartrol), fleistolol, labetalol (Normadyne, Trandate), levobumolol (Betagan), metoprolol (Lopressor), nadolol (Corgard), oxprenolol, penbutolol (Levatol), pindolol (Visken), propranolol (Inderal, Blocadren, Timoptic), sofalol, timolol
3. Calcium channel blocker overdose or toxicity; including: verapamil (Calan, Isoptin), diltiazem (Cardizem), nifedipine (Procardia, Adalat), nicardipine (Cardene, Vasonase), nimodipine (Nimotop), amlodipine, felodipine, flunarizine, bepridil, isradipine, nisoldapine, nitrendapine

**CONTRAINDICATIONS:**

1. Allergy or known hypersensitivity to glucagon

**ADVERSE REACTIONS/SIDE EFFECTS:**

1. Occasional nausea and vomiting

**ADMINISTRATION:**

1. For hypoglycemia:
  - A. When IV access is unavailable, an initial dose of glucagon may be given prior to contact with medical control.
  - B. Glucagon comes with one unit (1 mg) of powdered glucagon and 1 ml of diluting solution.
  - C. Inject diluting solution into powdered glucagon vial. Shake gently until solution is clear and draw up medication into syringe.
  - D. Inject SQ or IM into abdomen, buttocks, thigh or upper arm.
    1. Turn patient to one side in case vomiting should occur.
    2. If patient wakes up and is able to swallow, give a fast acting carbohydrate immediately.
  - E. Repeat blood glucose measurement.
  - F. Further orders must come from monitoring physician.
2. For overdose or toxicity, consult with medical control physician.

**PEDIATRIC CONSIDERATIONS:**

1. Do not give to patients < 12 years without physician order.
2. For small children, usual dose is half the adult dose.

**SPECIAL NOTES:**

1. ALS: For severe hypoglycemia (blood sugar < 40 mg/dL), 50% dextrose IV is treatment of choice.
2. BLS with medication training: In the patient with decreased LOC, glucagon is preferred over oral dextrose.
3. For conscious patients, simple, oral carbohydrates are most effective.
4. If the family has already given patient glucagon, a dose may be administered prior to Medical Control Physician contact if still unconscious after 15 minutes.
5. All patients whose hypoglycemia is due to oral hypoglycemic agents should be transported.
6. Services with medication training must have glucometry capabilities.