

## Guidelines for use of mini-dose glucagon

### Indications for Use

1. Type 1 Diabetes
2. Unable to consume or absorb carbohydrate because of nausea, vomiting or diarrhea and blood glucose below 4 mmol/L
3. Food refusal after insulin given and blood sugar below 5 mmol/L
4. Inadvertent over-administration of rapid acting insulin

### You will need:

- Glucagon for injection
- An insulin syringe
- Blood glucose meter and strips

### Instructions for the preparation of mini-dose glucagon

1. Reconstitute the glucagon as per directions (inject 1cc of sterile diluent into the vial containing the glucagon powder). DO NOT use glucagon syringe after mixing glucagon.
2. Using the insulin syringe, draw up the recommended dose. Each “unit” on the syringe will equal 10 $\mu$ g (micrograms).

**Dosage Guide:** 2 years and under: give 2 “units” (=20  $\mu$ g)

Over 2 years: give 1 “unit” per year of age

Maximum of 15 “units” (= 150  $\mu$ g)

3. Inject the mini-dose glucagon exactly as you would insulin (subcutaneously).
4. Check the blood glucose every 30 minutes.
5. If after 30 minutes the blood glucose levels haven’t improved (that is, they remain under 5.0mmol/L), then repeat the glucagon using double the dose. (see chart below)

**Dosage Guide (doubled dose):** 2 years and under: give 4 “units” (=40  $\mu$ g)

Over 2 years: give 2 “units” per year of age

Maximum of 30 “units” (= 300  $\mu$ g)

6. The effective dose may be repeated every hour as needed to keep blood glucose levels above 4.5 mmol/L.
7. Reconstituted glucagon should be kept in the fridge between doses, and then discarded after 24 hours.
8. Remember to replenish the glucagon as soon as possible! Many pharmacies do not stock glucagon. It may take up to 1-2 weeks to order, so let your pharmacist know when your stock is out.

**CAUTION: Give the standard full dose of glucagon if child or adult has any of the following:**

- **Loss of consciousness**
- **Seizure**

Haymond MW, Schreiner B. Mini-dose glucagon rescue for hypoglycemia in children with type 1 diabetes.  
*Diabetes Care* 24 (4):643-645, 2001