

MINI-DOSE GLUCAGON

When to Use Mini-Dose Glucagon

Mini-Dose Glucagon is used during illness when the blood sugar levels are persistently under 4-6mmol/L and your child is unable to eat or drink enough to keep blood sugars above 4-6 mmol/L.

CAUTION: If your child is having a severe low blood sugar reaction,

DO NOT USE GLUCAGON: If your child is vomiting repeatedly (2-3 times in 1-2 hours) or is dehydrated (dry mouth, not voiding)

If you are not sure what to do, page your diabetes nurse or the diabetes doctor on call

Steps to Prepare and Give Mini-Dose Glucagon

1. Inject the 1 ml of water that is in the pre-filled Glucagon syringe into the vial of Glucagon and swirl the vial to mix the solution
2. Determine how much Mini-Dose Glucagon to give (See chart below)
3. Use an **INSULIN SYRINGE** to measure the Mini-Dose of Glucagon solution from vial
4. Give the Mini-Dose of Glucagon injection in the same injection sites as you would with insulin

How much Mini-Dose Glucagon to Give

Age	Units
Less than 2 years →	2 units
<i>Example: If child is 18 months of age give 2 units</i>	
2 – 15 years	1 unit per year of age
<i>Example: If child is 10 years of age give 10 units</i>	
Over 15 years	15 units
<i>Example: If teen is 17 years of age give 15 units</i>	



Ensure that the black plunger is in line with the

After Giving Mini-Dose Glucagon

1. Check your child's blood sugar in **15 minutes** and then **every 30 minutes** until blood sugar is **above 4-6mmol/L**
2. If after 30 minutes the blood sugar level is still lower than 4-6mmol/L, give your child another injection of Mini-Dose Glucagon but **DOUBLE** the dose.

The maximum DOUBLED dose is 30 units

Examples:

- If your child is 3 years old, the **first** dose of Mini-Dose Glucagon would be 3 units and the **second or third** dose would be 6 units.
- If your child is 16 years old, the **first** dose of Mini-Dose Glucagon would be 15 units and the **second or third dose** would be 30 units, as this is the maximum dose of Mini-Dose Glucagon.

Age	Initial Dose	Doubled Dose
Less than 2 years	2 units	4 units
2 – 15 years	1 unit per year of age	2 units per year of age
Over 15 years	15 units	30 units

3. Mini-Dose Glucagon can be given every 30-60 minutes
4. Check the blood sugar at least **every 30 minutes** until the blood sugar is over 4-6 mmol/L, then **every hour** until your child is able to take enough sugar by mouth to keep the blood sugar level in a safe range.
5. Keep the unused glucagon in the refrigerator for up to 24 hours
6. Don't forget to get a replacement glucagon kit from your pharmacy

Mini-Dose Glucagon should NOT be given more than 5 times in a 24 hour period. If your child requires more than 5 doses of Mini-Dose Glucagon, your child should be taken to the closest emergency room for assessment and treatment.

References:

Mini-dose Glucagon Rescue for Hypoglycemia in Children with Type 1 diabetes, Diabetes Care (2001) Morey, Haymond & Barbara Schreiner
Mini-dose glucagon rescue for mild hypoglycemia in children with type 1 diabetes: The Brisbane experience, Journal of Pediatrics and Child Health (2006) Mary Hartley, Michael J. Thomsett & Andrew M Cotterill