

GLUCAGON FOR SEVERE LOW BLOOD SUGAR (HYPOGLYCEMIA)

What is glucagon?

Glucagon is a hormone made by the pancreas. It is used to treat severe low blood sugar. It raises the blood sugar by sending a signal to the liver to release stored sugar.

You can get glucagon from your pharmacy. Glucagon is manufactured by Eli Lilly (Lilly Glucagon™) and by Novo Nordisk (GlucaGen® HypoKit). Your pharmacy may need to order it. This can take a few days. It should be stored at a controlled room temperature of 20-25°C (68-77°F).

When should I give glucagon?

Use glucagon when your child is having a **severe low blood sugar**. Your child may be:

- unconscious
- having a seizure
- so uncooperative that you cannot give juice or sugar by mouth

If your child is unconscious or having a seizure, turn him/her on his/her side.

How do I give glucagon?

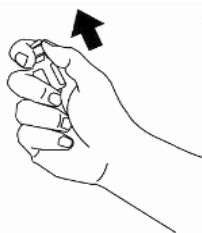
You must inject it. You cannot give glucagon by mouth. Glucagon is injected the same way as an insulin injection.

Glucagon comes in a kit. The kit includes:

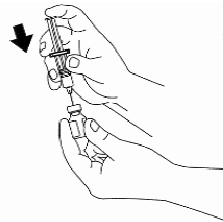
- A small bottle that has 1 milligram (mg) of glucagon. The glucagon is a dry powder.
- A syringe that is filled with 1 cc of sterile liquid.

Follow the steps below:

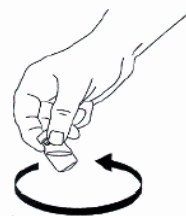
1. Remove the cap from the bottle.
2. Inject the liquid from the syringe into the dry powder bottle.
3. Roll the bottle gently to dissolve the powder. Do not shake the bottle.
4. Draw the fluid back into the syringe.



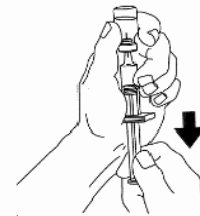
(1)



(2)



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- Inject glucagon the same way that you would give an insulin injection (hip, thigh, arm, but not abdomen).

Use the glucagon solution as soon as it is mixed.

- Your child may take 10-20 minutes to respond fully.
- Once your child is alert, give juice or other fast-acting sugar.
- After the fast-acting sugar, give your child some longer-acting carbohydrate. This is to stop the blood sugar from dropping too low again.
- If your child is not alert and able to swallow after 15 minutes, give another dose of glucagon or call 911.
- Contact your family doctor or your diabetes team before giving the next dose of insulin. Your child's insulin dose may need to be changed.

How much glucagon should I give my child?

If your child is:	Give this much glucagon:
Under 2 years of age	Your doctor will tell you how much to give. Write this down here: _____
2 to 5 years of age	$\frac{1}{2}$ bottle ($\frac{1}{2}$ cc or $\frac{1}{2}$ mg)
6 years of age or older	1 bottle (1 cc or 1 mg)

Are there any side effects of using glucagon?

Your child may have an upset stomach or vomit after getting glucagon. This can last up to 24 hours.

Check the expiry date on your supply of glucagon. Make sure your supply is never out of date.

Keep this handout with your glucagon kit.

See also our handout *Mini-Dose Glucagon to Prevent Serious Hypoglycemia*.

Novo Nordisk's product monograph for GlucaGen®:
www.paladin-labs.com/our_products/PM_GlucaGen_EN.pdf

Eli Lilly has an online tutorial showing how to mix up and give Lilly Glucagon™:
www.lillyglucagon.com/

Eli Lilly also has an iPhone® app for Lilly Glucagon™, including demos:
www.glucagonapp.com