Mini-Dose Glucagon Rescue

When your child is sick and cannot keep food down, his or her blood glucose can drop quickly. A small amount of glucagon (a mini-dose) can raise the blood glucose before it becomes too low.

What you will need

- Glucagon powder in a bottle (vial)
- Syringe with liquid to mix with powder
- Insulin syringe (30, 50 or 100 unit) to give the glucagon

Keep the glucagon vial and syringe where it is handy for you, but away from children. Check the expiry date and replace the kit before it expires.

When to use Mini-Dose Glucagon Rescue

Give mini-dose glucagon:
- When your child’s blood glucose is below 5.0 mmol/L and he or she refuses to eat or cannot keep food or liquids down because of nausea or vomiting.
- If you have given your child too much rapid-acting insulin by mistake.
DO NOT GIVE mini-dose glucagon:
- If your child has passed out and is unable to swallow. This is an emergency. Call 911 and give your child a full dose of glucagon.
- If your child has ketones or is dehydrated. Follow the illness guidelines from the diabetes team (refer to the handout “Caring for your child when he or she is sick”).

How to use Mini-Dose Glucagon Rescue

Prepare the glucagon

Remove the “flip-off” seal from the vial of glucagon.

Remove the cap from the needle.

Insert the needle into the vial. Inject all the liquid from the syringe into the vial.

Remove the needle and safely discard this syringe.

Swirl the vial gently until the powder is fully dissolved and the liquid becomes clear.

Turn the vial upside down.

Insert the needle of the insulin syringe into the vial.

Draw up the required amount of glucagon into the insulin syringe (from the chart on the next page).
Give the glucagon

- The mini-dose of glucagon depends on your child’s age. Each unit on the insulin syringe = 10 micrograms of glucagon.

<table>
<thead>
<tr>
<th>Age of child</th>
<th>First dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 2 years</td>
<td>2 units (20 micrograms)</td>
</tr>
<tr>
<td>3 to 15 years</td>
<td>1 unit per year of age</td>
</tr>
<tr>
<td>over 16 years</td>
<td>15 units (150 micrograms)</td>
</tr>
</tbody>
</table>

- Inject the mini-dose of glucagon in the same way you give insulin.
- Check your child’s blood glucose every 15 minutes for the first hour.
- If the blood glucose is still below 5 mmol/L after 30 minutes, give your child a second injection of glucagon, with double the dose.

<table>
<thead>
<tr>
<th>Age of child</th>
<th>Double Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 2 years</td>
<td>4 units (40 micrograms)</td>
</tr>
<tr>
<td>3 to 15 years</td>
<td>2 units per year of age</td>
</tr>
<tr>
<td>over 16 years</td>
<td>30 units (300 micrograms)</td>
</tr>
</tbody>
</table>

- Check your child’s blood glucose every 15 minutes for 1 hour. Then, re-check the blood glucose each hour.
- Give mini-dose glucagon every hour as needed to keep blood glucose above 5 mmol/L. Give the dose that works best – either the first or double dose.
- Encourage your child to eat. Offer your child a fast-acting carbohydrate (such as regular pop or juice) and a long-acting carbohydrate (such as toast or crackers, a protein may be added).
- Keep unused, mixed glucagon in the refrigerator between doses. Discard after 24 hours.
- Replace the glucagon kit as soon as possible.

If your child’s blood glucose is LESS THAN 90mg/dL (5 mmol/L) despite mini-dose glucagon injections or taking carbohydrates, get medical help right away.
Notes:

Reference: