How to Use Glucagon: 8 Steps

Step 1
Flip off the seal from the vial of Glucagon powder.

Step 2
Remove the needle cover from the syringe. **DO NOT REMOVE THE PLASTIC CLIP FROM THE SYRINGE**, as this may allow the push rod to come out of the syringe.

Step 3
Insert the needle into the rubber stopper on the vial, then inject the entire contents of the syringe into the vial of Glucagon powder.

Step 4
Remove the syringe from the vial, then gently swirl the vial until the liquid becomes clear. Glucagon should not be used unless the solution is clear and of a water-like consistency.

Step 5
Insert the same syringe into the vial and slowly withdraw all of the liquid. In children weighing less than 44 pounds, withdraw half the liquid (0.5 mark on the syringe).

Step 6
Cleanse site on buttock, arm or thigh and inject Glucagon immediately after mixing. Inject the Glucagon and then withdraw the needle. Apply gentle pressure against the injection site.

Step 7
Turn the person on his/her side. When an unconscious person awakens, he/she may vomit.
Call 911 immediately after administering Glucagon. If the person does not awaken within 15 minutes, you may administer a second dose of Glucagon, if previously instructed by your healthcare provider to do so.
As soon as the person is awake and able to swallow, give him/her a fast-acting source of sugar (such as fruit juice) followed by a snack or meal containing both protein and carbohydrates (such as cheese and crackers, or a peanut butter sandwich).

Step 8
Discard any unused reconstituted Glucagon.

Source: [http://www.lillyglucagon.com/how-to-use accessed March 6, 2015](http://www.lillyglucagon.com/how-to-use)
INFORMATION FOR THE USER

GLUCAGON
FOR INJECTION
(rDNA ORIGIN)

BECOME FAMILIAR WITH THE FOLLOWING INSTRUCTIONS BEFORE AN EMERGENCY ARISES. DO NOT USE THIS KIT AFTER DATE STAMPED ON THE BOTTLE LABEL. IF YOU HAVE QUESTIONS CONCERNING THE USE OF THIS PRODUCT, CONSULT A DOCTOR, NURSE OR PHARMACIST.

Make sure that your relatives or close friends know that if you become unconscious, medical assistance must always be sought. Glucagon may have been prescribed so that members of your household can give the injection if you become hypoglycemic and are unable to take sugar by mouth. If you are unconscious, glucagon can be given while awaiting medical assistance.

Show your family members and others where you keep this kit and how to use it. They need to know how to use it before you need it. They can practice giving a shot by giving you your normal insulin shots. It is important that they practice. A person who has never given a shot probably will not be able to do it in an emergency.

IMPORTANT
• Act quickly. Prolonged unconsciousness may be harmful.
• These simple instructions will help you give glucagon successfully.
• Turn patient on his/her side to prevent patient from choking.
• The contents of the syringe are inactive. You must mix the contents of the syringe with the glucagon in the accompanying bottle before giving injection. (See DIRECTIONS FOR USE below.)
• Do not prepare Glucagon for Injection until you are ready to use it.

WARNING: THE PATIENT MAY BE IN A COMA FROM SEVERE HYPERGLYCEMIA (HIGH BLOOD GLUCOSE) RATHER THAN HYPOGLYCEMIA. IN SUCH A CASE, THE PATIENT WILL NOT RESPOND TO GLUCAGON AND REQUIRES IMMEDIATE MEDICAL ATTENTION.

INDICATIONS FOR USE
Use glucagon to treat insulin coma or insulin reaction resulting from severe hypoglycemia (low blood sugar). Symptoms of severe hypoglycemia include disorientation, unconsciousness, and seizures or convulsions. Give glucagon if (1) the patient is unconscious (2) the patient is unable to eat sugar or a sugar-sweetened product (3) the patient is having a seizure, or (4) repeated administration of sugar or a sugar-sweetened product such as a regular soft drink or fruit juice does not improve the patient’s condition. Milder cases of hypoglycemia should be treated promptly by eating sugar or a sugar-sweetened product. (See INFORMATION ON HYPOGLYCEMIA below for more information on the symptoms of hypoglycemia.) Glucagon is not active when taken orally.

DIRECTIONS FOR USE
TO PREPARE GLUCAGON FOR INJECTION
1. Remove the flip-off seal from the bottle of glucagon. Wipe rubber stopper on bottle with alcohol swab.
2. Remove the needle protector from the syringe, and inject the entire contents of the syringe into the bottle of glucagon. DO NOT REMOVE THE PLASTIC CLIP FROM THE SYRINGE. Remove syringe from the bottle.

3. Swirl bottle gently until glucagon dissolves completely. GLUCAGON SHOULD NOT BE USED UNLESS THE SOLUTION IS CLEAR AND OF A WATER-LIKE CONSISTENCY.

4. Using the same syringe, hold bottle upside down and, making sure the needle tip remains in solution, gently withdraw all of the solution (1 mg mark on syringe) from bottle. The plastic clip on the syringe will prevent the rubber stopper from being pulled out of the syringe; however, if the plastic plunger rod separates from the rubber stopper, simply reinsert the rod by turning it clockwise. The usual adult dose is 1 mg (1 unit). For children weighing less than 44 lb (20 kg), give 1/2 adult dose (0.5 mg). For children, withdraw 1/2 of the solution from the bottle (0.5 mg mark on syringe). DISCARD UNUSED PORTION.
USING THE FOLLOWING DIRECTIONS, INJECT GLUCAGON IMMEDIATELY AFTER MIXING.

5. Cleanse injection site on buttock, arm, or thigh with alcohol swab.

6. Insert the needle into the loose tissue under the cleansed injection site, and inject all (or 1/2 for children weighing less than 44 lb) of the glucagon solution. THERE IS NO DANGER OF OVERDOSE. Apply light pressure at the injection site, and withdraw the needle. Press an alcohol swab against the injection site.

7. Turn the patient on his/her side. When an unconscious person awakens, he/she may vomit. Turning the patient on his/her side will prevent him/her from choking.

8. FEED THE PATIENT AS SOON AS HE/SHE AWAKENS AND IS ABLE TO SWALLOW. Give the patient a fast-acting source of sugar (such as a regular soft drink or fruit juice) and a long-acting source of sugar (such as crackers and cheese or a meat sandwich). If the patient does not awaken within 15 minutes, give another dose of glucagon and INFORM A DOCTOR OR EMERGENCY SERVICES IMMEDIATELY.

9. Even if the glucagon revives the patient, his/her doctor should be promptly notified. A doctor should be notified whenever severe hypoglycemic reactions occur.

INFORMATION ON HYPOGLYCEMIA

Early symptoms of hypoglycemia (low blood glucose) include:

- sweating
- dizziness
- palpitation
- tremor
- hunger
- restlessness
- tingling in the hands, feet, lips, or tongue
- lightheadedness
- inability to concentrate
- headache

If not treated, the patient may progress to severe hypoglycemia that can include:

- drowsiness
- sleep disturbances
- anxiety
- blurred vision
- slurred speech
- depressed mood
- irritability
- abnormal behavior
- unsteady movement
- personality changes
- disorientation
- unconsciousness
- seizures
- death

The occurrence of early symptoms calls for prompt and, if necessary, repeated administration of some form of carbohydrate. Patients should always carry a quick source of sugar, such as candy mints or glucose tablets. The prompt treatment of mild hypoglycemic symptoms can prevent severe hypoglycemic reactions. If the patient does not improve or if administration of carbohydrate is impossible, glucagon should be given or the patient should be treated with intravenous glucose at a medical facility. Glucagon, a naturally occurring substance produced by the pancreas, is helpful because it enables the patient to produce his/her own blood glucose to correct the hypoglycemia.
POSSIBLE PROBLEMS WITH GLUCAGON TREATMENT
Severe side effects are very rare, although nausea and vomiting may occur occasionally.
A few people may be allergic to glucagon or to one of the inactive ingredients in glucagon, or
may experience rapid heart beat for a short while.
If you experience any other reactions which are likely to have been caused by glucagon, please
contact your doctor.

STORAGE
Before dissolving glucagon with diluting solution — Store the kit at controlled room
temperature between 20° to 25°C (68° to 77°F).
After dissolving glucagon with diluting solution — Should be used immediately. Discard any
unused portion. Solutions should be clear and of a water-like consistency at time of use.

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