



PATIENT & CAREGIVER EDUCATION

About Emergency Glucagon Treatments

This information explains what glucagon is and how to be prepared for an emergency. It also has instructions for caregivers who may need to give an emergency glucagon treatment.

- **Glucagon** (GLOO-kuh-gon) is a hormone that tells your liver to release stores of sugar into your bloodstream. This helps raise your blood sugar quickly.
- **Hypoglycemia** (HY-poh-gly-SEE-mee-uh) is blood sugar that's too low.
- **Severe hypoglycemia** is when either of these things happens:
 - Your blood sugar level goes below 54 milligrams per deciliter (mg/dL).
 - You feel faint, weak, or confused and cannot care for yourself because your blood sugar is too low.

About emergency glucagon treatments

An emergency glucagon treatment is a medication used to treat severe hypoglycemia. Your liver stores sugar to use as energy or to raise low blood sugar. An emergency glucagon treatment tells your liver to release the sugar into your bloodstream. This helps raise your blood sugar back to normal levels (70 mg/dL).

Read *About Hypoglycemia (Low Blood Sugar)* (www.mskcc.org/pe/low-blood-sugar) for more information about hypoglycemia and how to treat it.

People with diabetes may take insulin injections. Never use insulin if your blood sugar level is below 70 mg/dL.

When to use an emergency glucagon treatment

It's best to treat hypoglycemia by eating or drinking a rapid acting sugar, such as juice or glucose tablets. Rapid acting sugars are foods and drinks that have glucose, dextrose, or sugar listed as the main ingredient. If you cannot eat or drink, use an emergency glucagon treatment.

If you become confused, you may need someone else to give you the treatment. Share this information with family members, friends, and coworkers ahead of time. They will need to know what to do to help you in case of an emergency. Have them read the "A Caregiver's Guide to

Emergency Glucagon Treatments” section of this resource for more information.

How to prepare yourself to use emergency glucagon treatments

Talk with your healthcare provider

Tell your healthcare provider if you have:

- **Pheochromocytoma** (FEE-oh-KROH-moh-sy-TOH-muh). This is a small tumor on the adrenal gland.
- **Insulinoma** (IN-suh-lih-NOH-muh). This is a tumor that secretes insulin.
- **Glucagonoma** (GLOO-kuh-guh-NOH-muh). This is a tumor that secretes glucagon.

Tell your healthcare provider if you cannot eat or drink for one week or longer. This may cause the sugar stored in your liver to become low. When this happens, glucagon may not work as well. You may need to get dextrose (a form of sugar) through an intravenous (IV) line to treat hypoglycemia.

Store your emergency glucagon treatment

Keep your emergency glucagon treatment at room temperature (68 °F to 77 °F or 20 °C to 25 °C). Do not refrigerate or freeze it. Keep it in the container it came in, tightly closed. Tell your family, friends, and coworkers

where you keep your treatment stored.

Check the expiration date on your glucagon treatment

Set an alarm or mark your calendar to remind you to check the expiration date regularly. Get a new prescription from your healthcare provider and replace it before it expires.

A Caregiver's Guide to Emergency Glucagon Treatments

This information explains when to use emergency glucagon treatment. It also explains the different types of emergency glucagon treatment kits. Read the “Types of emergency glucagon treatments” section of this resource for more information about their specific treatment.

Do not wait until an emergency to read this information. Be ready for an emergency by doing these things ahead of time:

- Read *About Hypoglycemia (Low Blood Sugar)* (www.mskcc.org/pe/low-blood-sugar).
- Know when and how to use their emergency glucagon treatment.
- Talk with the person about where they keep their emergency glucagon treatment.

When to use an emergency glucagon treatment

You may need to use an emergency glucagon treatment if the person has severe hypoglycemia and cannot take care of themselves. **Only use the emergency glucagon treatment if the person cannot eat or drink.**

If they are able to safely eat or drink, follow the rule of 15/15. If the person starts to cough or has difficulty swallowing do not give them anything else to eat or drink.

If the person loses consciousness:

1. Give them their emergency glucagon treatment right away.
2. Turn them on their side after giving them the treatment. They might vomit (throw up) after getting glucagon. This can be dangerous if they're lying on their back.
3. Call 911 for an ambulance.

What to do after giving someone an emergency glucagon treatment

Check the person's blood sugar level 15 minutes after the treatment. An unconscious person will usually wake up within 15 minutes.

If the person is awake within 15 minutes

- If their blood sugar is still below 70 mg/dL, follow the rule of 15/15.
- If their blood sugar is 70 mg/dL or higher, have them eat a snack or next meal within one hour. This will help stop their blood sugar from dropping again. A small snack may include one of the following:
 - Peanut butter or cheese with 4 to 5 crackers.
 - Half of a sandwich and 4 ounces of milk.
 - A single-serve container of Greek yogurt.

If the person is not awake after 15 minutes

- Give them a second emergency treatment, if they have one.
- Wait for emergency services to arrive.

Types of emergency glucagon treatments

There are different types of emergency glucagon treatment devices. It helps to be familiar with the type of device the person has before you need to use it. Follow the instructions that come with the medication.

Gvoke HypoPen®

Gvoke HypoPen is an emergency glucagon injection (shot) device. The injection goes under the skin of the person's arm, belly, or thigh. An injection that goes under the skin is a subcutaneous (SUB-kyoo-TAY-nee-us) injection.

Gvoke Pre-filled syringe®

Gvoke Pre-filled syringe is an emergency glucagon injection device. The injection goes under the skin of the person's arm, belly, or thigh. An injection that goes under the skin is a subcutaneous (SUB-kyoo-TAY-nee-us) injection.

BAQSIMI®

BAQSIMI is an emergency glucagon powder. It's sprayed into the person's nose, like other nasal sprays.

Emergency glucagon injection kit

An emergency glucagon injection kit is an intramuscular (IN-truh-MUS-kyoo-ler) medication. An intramuscular injection (shot) goes directly into the muscle. Emergency glucagon injection kits do not come ready to use like some other treatments. You will need to get it ready right before you use it.

How to safely get rid of an emergency glucagon treatment kit

Each emergency glucagon treatment device should only be used once. After you use it, throw it away. If the person needs another treatment, use a new device.

Do not throw needles or syringes directly into the trash or flush them down the toilet. Put them into a sharps container or a hard, plastic container with a screw top lid, such as a laundry detergent bottle. Label the bottle by writing “Home Sharps: not for recycling” on it. Read *How to Store and Get Rid of Your Home Medical Sharps* (www.mskcc.org/pe/store_get_rid_sharps) for more information.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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