PATIENT & CAREGIVER EDUCATION

Giving Yourself an Emergency Injection Using Solu-Cortef® Act-O-Vial

This information explains how to give yourself an emergency injection (shot) of Solu-Cortef®. Solu-Cortef is a medication which contains cortisol.

About Cortisol

Cortisol is a hormone made by your adrenal glands. Your adrenal glands are located above your kidneys.

Cortisol helps:

- Your body heal itself when you’re sick or when you get hurt
- Maintain your blood pressure and heart function
- Control your blood sugar levels

About Adrenal Insufficiency

Adrenal insufficiency is when your adrenal glands don’t make enough cortisol.

If you have adrenal insufficiency, you need to take medication to replace the cortisol every day.

Sometimes, your body will need extra cortisol. This can be when you’re sick or have a serious injury. When you get sick, your doctor will recommend that you double or triple your daily hydrocortisone dose for 3 days until you feel better. You should call your doctor if you continue to feel sick.
If you don’t have enough cortisol, your body can go into adrenal crisis. This is when your blood pressure drops very low. When this happens, you will have to give yourself an emergency injection of a cortisol medication called Solu-Cortef. Your doctor will give you a prescription for Solu-Cortef.

**When to Give Yourself an Emergency Injection**

Give yourself an emergency injection of Solu-Cortef if you:

- Have a serious injury, such as breaking a bone or losing a lot of blood
- Are vomiting
- Feel faint or like you’re going to pass out
- Are too sick to take your daily cortisol medication

There may be other times when you should give yourself an emergency injection. Follow your doctor’s instructions.

You will need to make an emergency injection kit. You should make sure your kit is always ready for you when you need it. Call your doctor’s office if you have any questions.

**Make an Emergency Injection Kit**

You will need to make and maintain an emergency injection kit (see Figure 1). Your emergency injection kit should include:

- Your Solu-Cortef Act-O-Vial
- 2 alcohol wipes
- 2 sterile syringes with a needle
- Gauze
- A bandage (Band-Aid®)
- Disposable sharps container, such as an empty laundry detergent bottle with a
How to Give Yourself an Emergency Injection

Follow the instructions below to give yourself an emergency injection of Solu-Cortef.

Your caregiver should also know how to give you a Solu-Cortef injection in case you can’t do it yourself. After practicing in the hospital with your nurse, you and your caregiver should review these instructions together.

Get ready to give the injection

1. Open your emergency injection kit and take all your supplies out. Place them in a clean area, such as your kitchen table.

2. Check the expiration date on the Solu-Cortef Act-O-Vial. If the medication has expired, don’t use it. Check if you have another vial that isn’t expired. If you don’t have another vial, call 911.

3. Wash your hands with warm water and soap for at least 20 seconds or use an alcohol-based hand sanitizer.

4. Mix the medication in the vial.
   ○ The vial has liquid in the top section and powder in the bottom section. Press the yellow cap down so that liquid mixes with the powder (see Figure 1).
2. Pressing the cap.

Figure 2. Pressing the cap.

- Turn the vial upside down several times until the medication is fully mixed. It will be cloudy at first but then will turn clear after a few seconds. Don’t use the medication if it stays cloudy. Try another vial or call 911 if you don’t have one.

5. Remove the yellow disc on the top cover of the vial (see Figure 3). You will see an orange rubber stopper underneath.

Figure 3. Removing the yellow disc.

6. Clean the top of the vial with an alcohol wipe (see Figure 4). Let it dry.

Figure 4. Cleaning the top of the vial.
7. Pick up the syringe. Remove the cover from the needle.

8. Turn the vial upside down. Insert the needle into the middle of the orange rubber stopper (see Figure 5). Make sure the needle tip is in fluid.

![Figure 5. Drawing the Solu-Cortef into the syringe](image)

9. Pull the plunger of the syringe gently to draw the medication into the syringe. Then, pull the needle out of the vial.

- Your doctor will tell you how much of the medication to draw into the syringe. Check the markings on the syringe to make sure you’re using the right amount.

10. Check the syringe for air bubbles.

- If there are air bubbles, hold the syringe upright with the needle pointing up. Gently tap the syringe with your fingers until the air bubbles rise to the top of the syringe, near the needle (see Figure 6). Slowly push the plunger up to force the air bubbles out of the syringe, being careful not to release the medication.
11. Once all the air bubbles are out, check to make sure you still have the right amount of medication in your syringe.
   
   - If you need to put more medication into your syringe, repeat steps 8 to 10.

12. Once you have the right amount of medication in your syringe, put the cap back on the syringe and place it down.

13. Find the injection site. The injection site is about halfway up your thigh towards the outer part of your thigh (see Figure 7).

14. Pick up the clean alcohol wipe. Using firm pressure, clean the skin on your
injection site with the alcohol wipe. Start at the center of the site and move outward in a circular motion. Let your skin dry before giving yourself the injection.

**Give the injection**

1. Pick up the syringe with your dominant hand (the hand you write with). Remove the cap. Hold the syringe as you would hold a pencil.

2. With your nondominant hand (the hand you don’t write with), press down on your skin around the area where you’re giving yourself the injection. Insert the needle into your thigh in 1 quick motion at a 90-degree angle (straight down into your thigh) (see Figure 8). Your nurse will tell you how deep to insert the needle.

![Figure 8. Inserting the needle into your thigh.](image)

3. Using your index finger, push the plunger gently to inject the medication into your thigh (see Figure 9).
4. Keep the needle in your thigh for 10 seconds so the medication goes into your body. Then, remove the needle.

5. Press down at the injection site with the gauze for a few seconds. Cover the injection site with a bandage (Band-Aid®).

6. Place the syringe and needle into the sharps container. You can throw the vial away in your regular garbage. For information about storing and disposing of your home medical sharps, ask your nurse for the resource *How to Store and Dispose of Your Home Medical Sharps* (www.mskcc.org/pe/store_dispose_sharps).

**Call 911 or have your caregiver take you to a nearby emergency room after giving yourself the injection.**

**MedicAlert® jewelry**

You should also wear a MedicAlert® bracelet or necklace stating that you have adrenal insufficiency. This way, if you’re ever seriously ill or hurt, medical personnel will know that you may need an emergency injection. For more information, visit the MedicAlert® website at www.medicalert.com. You can also call MedicAlert® at 800-432-5378.
If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

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