Diabetes Overview

3/24/2020

Diabetes Care Information Packet

- Diabetes Mellitus, symptoms, types, diet and activity
- Hyperglycemia
- Hypoglycemia
- Diabetes Complications
- Diabetic Foot care
- CRMA Diabetes lab testing and FSBS
- Glucometer Instructions (Example)
- Oral meds
- Insulin Overview
- Types of insulin with 'expiration date when opened'
- Insulin injection how to
- Insulin pen how to
- EpiPen instructions

Diabetes Mellitus (MELL-ih-tus):

- disease in which blood glucose levels are above normal (normal 70-115/ 80-120)
- most of the food that is eaten turns into glucose, or sugar, for the body to use for energy
- the pancreas, an organ that lies near the stomach, makes a hormone called insulin to help glucose get into the cells of the body
- if diabetic, body either does not make insulin or does not make enough insulin or cannot use its own insulin as well as it should- causes sugar to build up in blood

Symptoms of Diabetes:

People who think they might have diabetes must visit a physician for diagnosis. They might have SOME or NONE of the following symptoms:

- Frequent urination
- Excessive thirst
- Extreme hunger, even though you are eating
- Feeling very tired much of the time
- Blurry vision
- Very dry skin
- Cuts/ bruises that are slow to heal
- More infections than usual
- Unexplained weight loss, even if you are eating more (type 1)
- Tingling, numbness or pain in hands or feet (type 2)

Types of Diabetes:

- <u>Type 1 Diabetes</u> was previously called insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes. Type 1 diabetes develops when the body's immune system destroys pancreatic beta cells, the only cells in the body that make the hormone insulin that regulates blood glucose.
 - To survive, people with type 1 diabetes must have insulin delivered by injection or a pump.
- <u>Type 2 Diabetes</u> was previously called non insulin-dependent diabetes mellitus (NIDDM) or adult-onset diabetes. Type 2 diabetes accounts for about 90% to 95% of all diagnosed cases of diabetes. It usually begins as insulin resistance, a disorder in which the cells do not use insulin properly. As the need for insulin rises, the pancreas gradually loses its ability to produce it.
 - Predisposing factors
 - o Treatment
- <u>Gestational diabetes</u> is a form of glucose intolerance diagnosed in some women during pregnancy. There is an increased chance of developing type 2 diabetes later in life for these women.
- <u>Prediabetes</u> occurs when one's blood glucose levels are higher than normal, but not high enough to be diagnosed as having type 2 diabetes. They are at a higher risk of developing type 2 diabetes and will be monitored by the physician.

There are no clear symptoms of prediabetes and one does not automatically develop type 2. Losing weight (at least 10-15 pounds), eating better and exercising can make a difference.

• <u>Other specific types of diabetes</u> resulting from specific genetic syndromes, surgery, drugs, malnutrition, infections, and other illnesses may account for 1% to 5% of all diagnosed cases of diabetes

Dietary Requirements:

- Meal plan specific to individual as directed by their health care team/ registered dietician.
- General requirements:
 - Eat a wide variety of foods to get the energy, vitamins and minerals you need.
 - Eat more whole grains, vegetables, fruits and fat-free and low-fat dairy products.
 - Limit processed foods

- Eat less cholesterol, saturated fat, and trans fat
- Healthy Food Choices
 - Eat smaller portions.
 - Eat less fat. Choose fewer high-fat foods and use less fat for cooking. You especially want to limit foods that are high in saturated fats or trans fat, such as:
 - Fatty cuts of meat.
 - Fried Foods
 - Whole milk and dairy products made from whole milk.
 - Cakes, candy, cookies, crackers, and pies.
 - Salad dressings.
 - Lard, shortening, stick margarine, and nondairy creamers.
- Eat More of...
 - Eat more fiber by eating more whole-grain foods. Whole grains can be found in:
 - Breakfast cereals made with 100% whole grains.
 - Oatmeal.
 - Whole grain rice.
 - Whole-wheat bread, bagels, pita bread, and tortillas.
 - Eat a variety of fruits and vegetables every day. Choose fresh, frozen, canned, or dried fruit and 100% fruit juices most of the time. Eat plenty of veggies like these:
 - Dark green veggies (e.g., broccoli, spinach, brussel sprouts).
 - Orange veggies (e.g., carrots, sweet potatoes, pumpkin, winter squash).
 - Beans and peas (e.g., black beans, garbanzo beans, kidney beans, pinto beans, split peas, lentils).
- Eat Less of...
 - Eat fewer foods that are high in sugar, such as:
 - Fruit-flavored drinks.
 - Sodas.
 - Tea or coffee sweetened with sugar.
 - Use less salt in cooking and at the table. Eat fewer foods that are high in salt, such as:
 - Canned and package soups.
 - Canned vegetables.
 - Pickles.
 - Processed meats.

Getting active can help

Another part of living a full and healthy life with diabetes is being active. No matter what one does or how activity is approached, know that any type of physical activity can help lower blood sugars. Other benefits of physical activity include

- Having more energy
- Relieving stress
- Keeping your joints flexible
- Lowering your risk for heart disease and stroke
- Feeling great

Be sure to check with the provider if there are questions about which activities are right for the individual. Some types of good physical activity to consider include: walking, biking, swimming, taking stairs, strength training and flexibility exercises.

For more info visit <u>www.diabetes.org</u>





Causes: Too much food, too little insulin or diabetes pills, illness, or stress. **Onset:** Often starts slowly.



For more information, call the Novo Nordisk Tip Line at 1-800-260-3730 or visit us online at ChangingDiabetes-us.com.

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Low blood sugar (Hypoglycemia)

Causes

You might get low blood sugar (also called hypoglycemia) if you:

- Take certain medicines and eat too few carbohydrates
- Skip or delay meals
- Take too much insulin or diabetes pills (ask your diabetes care team if this applies to you)

Signs and Symptoms

Here's what may happen when your blood sugar is low:

- Are more active than usual
- Are sick
- Drink alcohol without eating enough food



Or you may have no symptoms at all.

If low blood sugar is not treated, it can become severe and cause you to pass out. If low blood sugar is a problem for you, talk to your doctor or diabetes care team.

Low blood sugar (Hypoglycemia)

What to do if you think you have low blood sugar

Check



Check your blood sugar right away if you have any symptoms of low blood sugar. If you think your blood sugar is low but cannot check it at that time, treat anyway.

Treat

Treat by eating or drinking **15 grams** of something high in sugar, such as:



4 ounces (½ cup) of regular fruit juice (like orange, apple, or grape juice) 4 glucose tablets or 1 tube of glucose gel



4 ounces (½ cup) of regular soda pop (not diet) 1 tablespoon of sugar, honey, or corn syrup





2 tablespoons of raisins

Wait



- Wait **15 minutes** and then check your blood sugar again:
- If it is still low, eat or drink something high in sugar again
- If your next meal is more than an hour away, eat a snack to keep your low blood sugar from coming back

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Diabetic Complications

- 1. **PVD peripheral vascular disease:** This is caused by a reduced blood supply to the extremities. It may result in numbness and tingling of the feet, which in turn causes a greater likelihood of foot infections, chronic skin ulcers, and gangrene.
- 2. **Visual changes:** This complication is very common in residents with diabetes. The individual will frequently suffer from blurred vision associated with elevated (high) blood sugar. When that occurs, the individual should be referred to his/her physician for prompt follow-up. Vision can return to normal when the blood glucose level returns to normal.

Diabetes weakens the blood vessels in the retina. Sometimes these blood vessels start to leak. This leads to retinal hemorrhage, degeneration of retinal vascular tissue, cataracts, and eventual blindness. Again, the resident should have regular eye exams to allow for early treatment of any changes.

- 3. **Renal Disease:** Blood passes through the kidneys. The kidneys take waste materials out of the blood. The wastes are then excreted in the urine. The kidneys are damaged by all the extra blood sugar that is filtered through them over the years. Then the resident becomes more susceptible to UTIs (urinary tract infections). Therefore, symptoms such as burning on urination must be reported promptly.
- 4. **Neuropathies:** Diabetic residents are more susceptible to degeneration of nerves, usually in the extremities. Therefore, it is most important to have the resident report any numbness or tingling in the extremities. Staff should inspect feet for blisters, ingrown toenails, and any open sores and report the findings to the supervisor. The bath water temperature should always be tested before immersing a limb of a diabetic resident, as the resident may not sense the heat.

People with diabetes tend to heal poorly. It is important to take good care of any wounds they may have so that there is no infection. Remember, the feet are especially vulnerable to problems. Be sure residents wear well-fitting shoes and clean socks. Their toenails should only be cut by a podiatrist. Any foot problems or injuries need to be brought to the physician's attention ASAP.

- 5. Skin problems: These residents are more prone to have skin infections or dry, itchy skin.
- 6. Heart disease & stroke: People with diabetes are at greater risk for heart disease and stroke

Diabetic Foot Care Dos and Don'ts

Feet undergo daily wear and tear. The best chance of avoiding serious compliccations is by following these rules. Remind the resident of these *DOs* and *DON'Ts* when providing care.

<u>DOs:</u>

- ✓ Learn facility policy for foot care for residents who have diabetes. Many facilities have podiatrists who visit regularly, or some residents go to the podiatrist's office.
- ✓ Wash feet daily with warm water and mild soap. Dry well afterward.
- ✓ Even if you are not responsible for foot care, check feet daily for cuts, blisters, corns, etc., especially when wearing new shoes. Be sure to check between toes.
- ✓ Use a milk skin cream or lotion (Nivea, Eucerin, etc.) daily for dry, scaly skin, but DO NOT put it between toes or on cuts.
- Residents should wear sturdy shoes and clean, colorfast socks or stockings that fit well. No garters or elastic bands.
- ✓ Elevate the resident's feet and encourage rest periods *if* there is swelling.

DON'Ts:

- Soak feet.
- DON'T USE:
 - Commercial corn medicines or corn plasters.
 - Strong chemicals like Epsom salt, bo1ic acid, iodine, or hydrogen peroxide.
 - Over-the-counter cortisone creams (even ones your doctor has prescribed for another part of your body).
- It reat corns, cuts, or infections. Get care from the physician.
- Put heat or cold directly on feet -- no heating pads, hot water bottles, or ice packs.
- ☑ Wear sandals or walk barefoot, especially on hot sand or concrete. Don't wear shoes without socks.
- It is that the fort temperature with the foot -- use the hand or elbow.

DIABETES CARE for CRMAs

Lab Testing:

A1C

- A1C levels will average blood sugar levels for the last 2-3 months. Fasting is not required for this lab test.
- Diabetes is diagnosed at an A1C of greater than or equal to 6.5% (per American Diabetes Assoc./ADA):

Result	A1C
Normal	less than 5.7%
Prediabetes	5.7% to 6.4%
Diabetes	6.5% or higher

FBS

- Fasting blood glucose level (fasting means not having anything to eat or drink- except water- for at least 8 hours before the test)
- Usually done first thing in AM before breakfast
- Diabetes is diagnosed at fasting glucose of greater than or equal to 126mg/dl (ADA):

Result	FBS
Normal	less than 100 mg/dl
Prediabetes	100 mg/dl to 125 mg/d
Diabetes	126 mg/dl or higher

Blood Glucose Monitoring

Finger sticks can be done by the resident or trained CRMA:

• Fasting (ADA)

- 80-130 diabetic (person without diabetes <100)
- Before Meals (Joslin Diabetes Center/JDC) 70-130 diabe
 - 2 hours after meals (per ADA)
 - Bedtime (JDC)

- 70-130 diabetic (person without diabetes <110) <180 diabetic (person without diabetes 140)
 - 90-150 diabetic (person without diabetes < 120)

Urine Testing- rarely done (not as accurate)

Fingerstick Blood Glucose:

Procedure for obtaining a blood glucose fingerstick:

- 1. Obtain equipment, including gloves, alcohol prep, lancet, test strips, and glucometer. Prepare the glucometer to receive a test strip per the manufacturer's instructions.
- 2. Wash hands.
- 3. Apply gloves.
- 4. Prepare your test strip as per manufacturer's instructions.
- 5. Select a portion of one finger that will cause least discomfort (usually on the side, not the tip or pad, avoid area near the nail bed as this is a sensitive area) and clean the area with alcohol.
- 6. Prepare the lancet.
- 7. Prick the chosen finger in the area prepared with alcohol. Make sure the alcohol is dry on finger before pricking it, if there is wet alcohol on the finger it will cause a stinging sensation.
- 8. If there is inadequate blood, you may need to apply pressure to the finger to obtain more: apply pressure distally at the last knuckle; or, starting at the proximal end, grasp the digit with your fingertips, and, applying pressure, "milk" the finger distally.
- 9. When there is an adequate amount of blood absorb the blood with the test strip.
- 10. Ensure that there is adequate blood on the test strip per the manufacturer's instructors. (If you have a cotton swab, you should give this to the patient to hold over the prick location.)
- 11. Place the test strip in the glucometer. Depending on the type of glucometer you have, you may have to wait for some time for a result.
- 12. Dispose of the lancet in a designated sharps container.
- 13. Dispose of used test strip, and other items used into trash.
- 14. Remove gloves.
- 15. Wash hands.
- 16. Chart the blood glucose level.
- 17. Return the glucometer to its storage area, and ensure there are adequate supplies for the next person who needs to use the glucometer.
- 18. Wash hands again.

Biohazard Disposal:

• Sharps containers for lancets/needles

Dispose in trash:

- Gloves worn when doing blood glucose fingerstick and insulin injection
- Used strips and other items used

Exposure Control

Any deep tissue injury, needle stick and/ or direct contact with blood needs to be reported immediately to supervisor, complete facility incident report and obtain medical intervention as directed.

Living Well with Diabetes

How to use your blood glucose meter

What you need to test your blood glucose

Your starter kit includes the following:

- Blood glucose meter
- Vial of test strips
- Lancing device
- Lancets

Before you start

- You may need to set the date and time on the meter
- Wash and dry your hands thoroughly with warm water.



- Insert a new test strip into your meter. Place the end of the strip with the 3 contact bars as far into the meter as it can go. Your meter will turn on automatically and display a number code.
- Check the code to make sure it matches the number code on the vial of test strips.



Note: If the number code on your meter doesn't match the number code on your test strip vial, you won't get an accurate reading. If the numbers don't match, follow the instructions that came with your meter to change the meter. code.

Getting test results

Step 1: Get a blood sample

Use your lancing device and a new lancet to get a drop of blood from your fingertip. Some people find that getting a blood sample from the side of their fingertip, rather then the top, makes it easier to apply the blood to the test strip.

Step 2: Apply blood to strip



Apply the blood droplet to the test strip when the blood droplet symbol appears in your meter window.

Touch and hold the drop of blood to the narrow channel at the top edge of the test strip.

Make sure that the channel in the strip is completely full. This ensures that your meter has a large enough blood sample to give you an accurate reading.

• If your sample doesn't fill the channel, add more blood to that strip within 5 seconds. If you get an error reading, discard the strip and start again.

Step 3: Read the result

Your meter will count down and display the result of your blood glucose level.

If you have any questions or concerns, contact LifeScan 1-800-227-8862.

Artwork is courtesy of LifeScan, Inc.



Oral Medications for Type 2 Diabetes

Insulin, taken by injection, was once the only medication available to lower blood sugar iglucose) levels if you had .type 2 diabetes. When lifestyle changes, such as diet, exercise and maintaining a healthy weight, alone aren't enough, insulin is still an option. Bui five classes of oral blood glucose lowering drugs also are a•1ailable.

A variety of oral medications in each of these drug classes exists. Each works differently and has its own set of advantages and disadvantages. Your doctor may recommend one or more medications lo manage your blood sugar. If the medicatjon doesn't work, heor she may adjust the dosage or suggest you try a new medication or a new combination of medications.

Drug Class	How they work	Advantages	Disadvantages
Generic Name (brand			
name)			
Sultonylureas	Stimulates pancreas	Combines well with	Can cause abnormally
Glipizide (Glucotrol)	to release insulin	druge	(bypoglycomia)
Glypage Micropage)		drugs	(hypogiycenna)
Glimeniride (Amatyl)			
Meglitinides	Stimulates pancreas	Works quickly when	Drug effects diminish
Repaglinide (Prandin)	to release insulin	taken with meals to	quickly and drugs must
Nateglinide (Starlix)		reduce high glucose	be taken with each
		levels; less likely than	meal; drug interactions
		sulfonylureas to cause	are possible; can cause
		hypoglycemia	hypoglycemia
Biguanides	Reduces the amount	Associated with	Can cause appetite
Mettormin (Glucophage)	of sugar the liver	minimal weight gain	loss, nausea, vomiting,
	bloodstroom	and may promote	corious condition colled
	botween meals	reduce blood fats	lactic acidosis – a
	Detween means	(cholesterol and	condition in which
		triglycerides)	lactic acid build up in
			your body
Alpha-glucosidase	Slows absorption of	Associated with	Can cause abdominal
<u>inhibitors</u>	sugar into your	minimal weight gain	bloating and gas: in
Acarbose (Precose)	bloodstream after	and limit the rapid rise	high doses Acarbose
Miglitol (Glyset)	eating	of blood sugar that can	can cause liver function
		occur after meals	abnormalities
Thiazolidinediones	Makes body cells,	Increases the amount	May cause swelling
Rosiglitazone (Avandia)	especially muscle	of glucose taken up by	(edema), weight gain,
Pioglitazone (Actos)	cells, more sensitive	muscle cells	and rarely shortness of
	to the effects of		breath; might worsen
	insulin		neart failure.

Diabetes Insulin Overview for CRMAs

Insulin:

- **Regular or short-acting** insulin (human) usually reaches the bloodstream within 30 minutes after injection. It peaks anywhere from 2 to 3 hours after injection, and is effective for about 3 to 6 hours.
- Intermediate-acting insulin (human) generally reaches the bloodstream about 2 to 4 hours after it is injected. It peaks 4 to 12 hours later, and is effective for about 12 to 18 hours. NPH is the only intermediate acting insulin currently marketed, and it is often used in combination with regular insulin.
- Long-acting insulins such as insulin glargine (Lantus) and insulin detemir (Levemir) have continuous, "peakless" action that mimics natural basal (background) insulin secretion. Lantus onset is between 2 and 4 hours, and its duration of action is approximately 24 hours.
- **Premixed** insulins may be convenient for those who mix NPH and regular into one syringe. The most typical mixture is 70 percent NPH and 30 percent regular.

Insulin Storage and Safety:

- Although manufacturers recommend storing your insulin in the refrigerator, injecting cold insulin can sometimes be painful. To counter that, many providers recommend storing the bottle of insulin you are using at room temperature.
- Check how long an insulin vial or cartridge should be used after the seal is punctured.
- Store the extra bottles in the refrigerator (med fridge temperature should be between 36-41)
- Before you use any insulin, check the expiration date.
- Check for particles or discoloration of the insulin.

Injection Techniques and Site Rotation:

- Insulin is injected in the subcutaneous layer of the body, usually in the fatty area of the abdomen, thigh, or the upper arm. Less common in the upper hips on the back and the buttocks.
- Site Rotation is used to keep the skin, fat, and muscle healthy. It involves following a regular pattern as you move from site to site. If an area is overused the site can cause tissue changes that lower or change insulin absorption.

Types of Insulin with Expiration Dates

Trefund Links

Insulin type	How it is delivered	Expiration when opened	Onset	Peak	Duration
Rapid Acting		The second second			
Admelog	Pens and vials	28 days	15-30 min	30 min-2 ½ hours	4-5 hours
Afrezza inhaled powder	4, 8 and 12 unit Cartridges	3 days	3-7 minutes	12-15 min	1 ½-3 hours
Apidra	Vials and pens	28 days	10-20 min	30 min-1 ½ hours	2-4 hours
Fiasp	Vials and pens	28 days	15-20 min	1 1/2- 2 hours	5 hours
Humalog, U-100 and U-200	Vials, pens, cart ridges for refillable pen	28 days	10-20 min	30 min-1/12 hours	3-5 hours
Novolog	Vials, pens, cartridges for refillable pen	28 days	10-20 min	1-3 hours	3-5 hours
Short Acting **					
Regular	Vials and pens	31-42 days, depending upon brand	15-30 min	2 %-5 hours	4-12 hours
U-500 (5x the concentration)	Vials and pens	28 days	30 min	4-8 hours	18-24 hours
Intermediate acting **					
NPH (created in 1946)	Vials and pens	31-42 days, depending upon brand	1-2 hours	4-12 hours	14-24 hours
Long acting			1-1212月1日1日		
Basaglar	Vials and pens	28 days	3-4 hours	No peak +	11-24 hours
Lantus	Vials and pens	28 days	3-4 hours	No peak +	11-24 hours
Levemir	Vials and pens	42 days	3-4 hours	No peak +	6-23 hours
Toujeo, U-300	Pen only	42 days	6 hours	No peak	24-36 hours
Tresiba, U-100 and U-200	Pen only	56 days	1 hour	9 hours	36-42 hours
Combination	States Sugar			加速路安全的	
NPH/Regular 70/30	Vials and pens	31-42 d vial 10 d pen	30 min	50 min- 2 hours and 6-10 hours	18-24 hours
Rapid acting 70/30	Vials and pens	28 d vial 14 d pen	15-30 min	1-4 hours	18-24 hours
Rapid acting 75/25	Vials and pens	28 d vial 10 d pen	15-30 min	1-6 ½ hours	12-24 hours
Rapid acting 50/50	Vials and pens	28 d vial 10 d pen	15-30 min		

Insulin Injections: A Step-by-Step Guide

If you're not a doctor, you may wonder what business you have injecting anyone—even yourself—with anything. But, believe it or not, you're qualified. Insulin injections have come a long way since the discovery of this miracle medication: They're quick, usually painless, and simple to do once you have a little practice. If you're new to insulin or just need a refresher, check out this illustrated guide to getting the good stuff into your body, where it can work its magic. • Illustrations by Celia Johnson

Step 1: Get ready.

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Back to

You'll want to find a place where you can be relaxed while you take care of business. Wash your hands before starting. Assemble your tools: the syringe and insulin vial. Examine the insulin in the vial for lumps, crystals, or discoloration; these are signs that the insulin is no good and should be discarded. If it's a new bottle, snap off the cap and write the date of opening on the bottle using a permanent marker that won't get rubbed off later.



Step 2: Prepare the syringe.

Remove the syringe caps. Pull the plunger to fill the syringe with air volume equal to the amount of insulin vou plan to inject.



Step 3: Draw the insulin.

Holding the syringe straight, stick the needle into the center of the rubber stopper in the insulin bottle and inject the air into the bottle. Turn the insulin bottle upside down with the needle still inside. Gently draw the desired amount of insulin into the syringe by pulling on the plunger. To get the right dose, line up the top of the plunger with the proper line.



Instead of drawing insulin out of a vial, ① you'll screw a special needle onto the tip of the pen. ② "Prime" the pen by ejecting a drop or two of insulin into the air to remove any bubbles. ③ Then "dial" the desired dose of insulin. ④ Choose your injection site as in Step 6 below. ⑤ After inserting the needle, press the button to inject the insulin. ③ Wait five seconds before removing the pen to make sure all the insulin is injected. ⑦ Then remove the needle. ③ Discard it in a sharps container.

Step 4: Check for and remove bubbles.

While the needle is still upside down in the insulin bottle, gently tap the side of the syringe to allow any bubbles to float to the top. Push any bubbles out of the syringe with the plunger, and then draw insulin back into the syringe to get the correct dose. Remove the needle from the bottle.



Step 5: Choose an injection site.

Pick your spot. You want to use a part of the body with a nice fat pad-like the abdomen (avoiding a 2-inch ring around your belly button), thighs, buttocks, or the fat on the back of the arm. Avoid injecting near moles or scar tissue. Make sure to rotate injection sites each time you take your insulin to avoid infection or irritation. Injection sites should be no less than a finger length apart.



Step 6: Prepare the injection site.

Pinch up a nice, thick fold of skin. People with ample fatty tissue can put the needle straight in, at 90 degrees to the body. Thin adults or children may need to angle the injection at 45 degrees. You may want to discuss the angle of injection with a health care provider. No matter what angle you choose, push the needle in and pull it out straight to avoid bruising.



Step 7: Inject.

When you're ready, bring the needle to the skin surface and push in. Push down the plunger slowly until all insulin has been injected. Wait five seconds, then release skin and pull out the needle. Don't recap the needleyou could accidentally poke yourself or forget that the syringe is used. Dispose of the used syringe in a sharps container. You're done!



Step-by-Step: Injecting with an Insulin Pen



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How to use an EpiPen® (epinephrine injection, USP) Auto-Injector

FPIPEN° FPIPEN, (epinephrine injection. USP) Auto-Injectors 0.3/0.15mg

Remove the EpiPen® or EpiPen Jr® Auto-Injector from the clear carrier tube. Flip open the yellow cap of your EpiPen® or the green cap of your EpiPen Jr® carrier tube. Tip and slide the auto-injector out of the carrier tube.

Hold the auto-injector in your fist with the orange tip pointing downward. Blue to the sky, orange to the thigh™.

With your other hand, remove the blue safety release by pulling straight up without bending or twisting it.



NEVER-SEE-NEEDLE® helps with protection. Protects against needle exposure before and after use.

NOTE:

- · The needle comes out of the orange tip.
- · To avoid an accidental injection, never put your thumb, fingers or hand over the orange tip. If an accidental injection happens, get medical help right away.

ADMINISTER

If you are administering EpiPen[®] or EpiPen Jr[®] to a young child, hold the leg firmly in place while administering an injection.

Place the orange tip against the middle of the outer thigh (upper leg) at a right angle (perpendicular) to the thigh.

Swing and push the auto-injector firmly until it "clicks." The click signals that the injection has started.

Hold firmly in place for 3 seconds (count slowly 1, 2, 3).

Remove the auto-injector from the thigh. The orange tip will extend to cover the needle. If the needle is still visible, do not attempt to reuse it.

Massage the injection area for 10 seconds.







You may need further medical attention. If symptoms continue or recur, you may need to use a second EpiPen® or EpiPen Jr® Auto-Injector.

INDICATIONS

EpiPen[®] and EpiPen Jr* Auto-Injectors are for the emergency treatment of life-threatening allergic reactions (anaphylaxis) caused by allergens, exercise, or unknown triggers; and for people who are at increased risk for these reactions. EpiPen* and EpiPen Jr* are intended for immediate administration as emergency supportive therapy only. Seek immediate emergency medical help right away.

IMPORTANT SAFETY INFORMATION

Use EpiPene (epinephrine injection, USP) 0.3 mg or EpiPen Jre (epinephrine injection, USP) 0.15 mg Auto-Injectors right away when you have an allergic emergency (anaphylaxis). Get emergency medical help right away. You may need further medical attention. Only a healthcare professional should give additional doses of epinephrine if you need more than two injections for a single anaphylactic episode.

Not actual patient.

Please see additional Important Safety Information and Indications on the back. Please see accompanying full Prescribing Information and Patient Information.

EpiPen® Auto-Injector: The #1 prescribed brand for 25+ years*

(epinephrine injection. USP) Auto-Injectors 0.3/0.15mg

FPIPEN[®]

EPIPENJr.

Over the years, doctors have prescribed EpiPen Auto-Injector more than any other brand of epinephrine auto-injector for those at increased risk for anaphylaxis. Anaphylaxis (an-a-fi-lax-is) is the medical term for a life-threatening allergic reaction. It can occur within minutes after your immune system mistakenly overreacts to an allergen. Know what symptoms to look for.



Interctions for a single araphylication splaced. Can be used to be a supervised of your verse, buttocks, fingers, toes, hands or feet. Hold the leg of young children firmly in place before

INDICATIONS

EpiPen and EpiPen Jr. Auto-Injectors are for the emergency treatment of life-threatening altergic reactions (anaphylaxis) caused by allergens, exercise, or unknown triggers; and for people who are at increased nsk for these reactions. EpiPen and EpiPen Jr. are intended for immediate administration as emergency supportive therapy only. Seek immediate emergency medical help right away.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.lda.gov/medwatch or call 1-800-FDA-1088.

For additional information, please contact us at 800-395-3376.



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and during injection to prevent injuries, In case of accidental injection, please seek immediate

injection site within a few days. Some of these infections can be serious. Call your healthcare

Tell your healthcare professional about all of your medical conditions, especially if you have

astinma, a history of depression, thyroid problems, Parkinson's disease, diabetes, high blood

pregnant, or are breastleeding or plan to breastleed. Be sure to also tell your healthcare professional all the medicines you take, especially medicines for asthma. If you have certain medical conditions, or take certain medicines, your condition may get worse or you may

pressure or heart problems, have any other medical conditions, are pregnant or plan to become

professional right away if you have any of the following at an injection site: redness that does not

Rarely, patients who have used EpiPen or EpiPen Jr may develop an infection at the

go away, swelling, tenderness, or the area feels warm to the touch.

have longer lasting side effects when you use EpiPen® or EpiPen Jr.

medical treatment.