

CLGW Controlled Acts Training

Presented by Prime Care Pharmacy

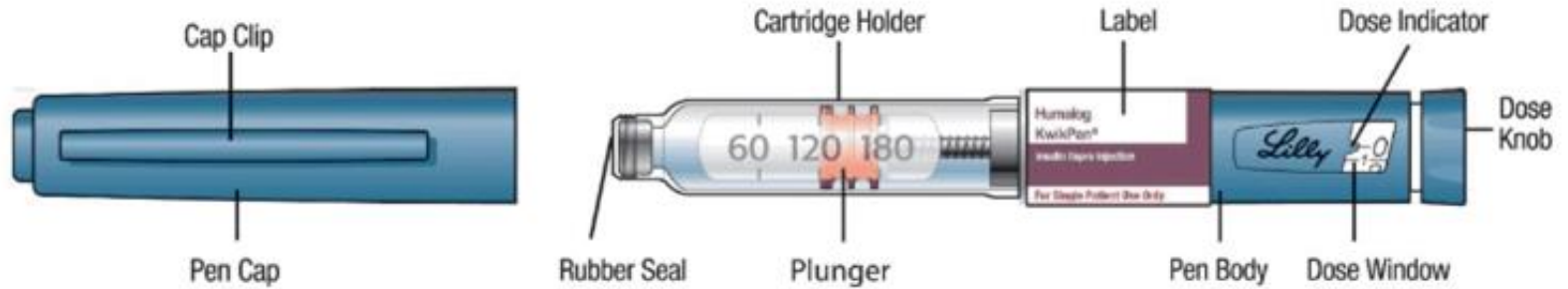
Learning Objectives

1. Subcutaneous Injectable Medications
2. Hypoglycemia
3. Glucometers
4. Epi-Pen
5. Inhalers
6. Suppositories and Enemas
7. Nasal Sprays
8. Eye Drops
9. Naloxone

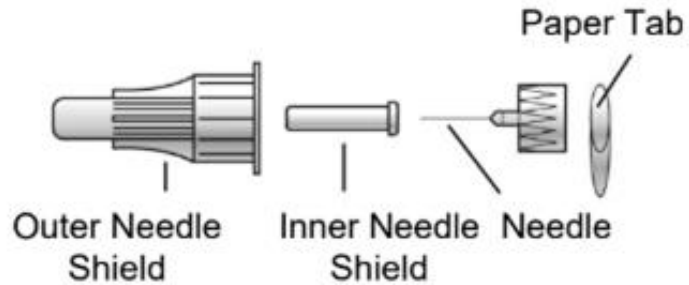
Subcutaneous Injectable Medications

- Many different medications are administered via an **injection under the skin** (subcutaneous)
- Most commonly you will administer insulin
- Some other types of injections could be anticoagulants, diabetes medications, biologics
- They all use the same principles for administering which we will review today





Pen Needle Parts (Needles Not Included)



Dose Knob



Step 1 - Check your insulin



Step 2 - Load the insulin pen
(reusable pens only)



Step 3 - Mix the insulin
(cloudy insulin only)



Step 4 - Attach the pen needle



Step 5 - Prime the pen



Step 6 - Set the dose



Step 7 - Determine the injection site

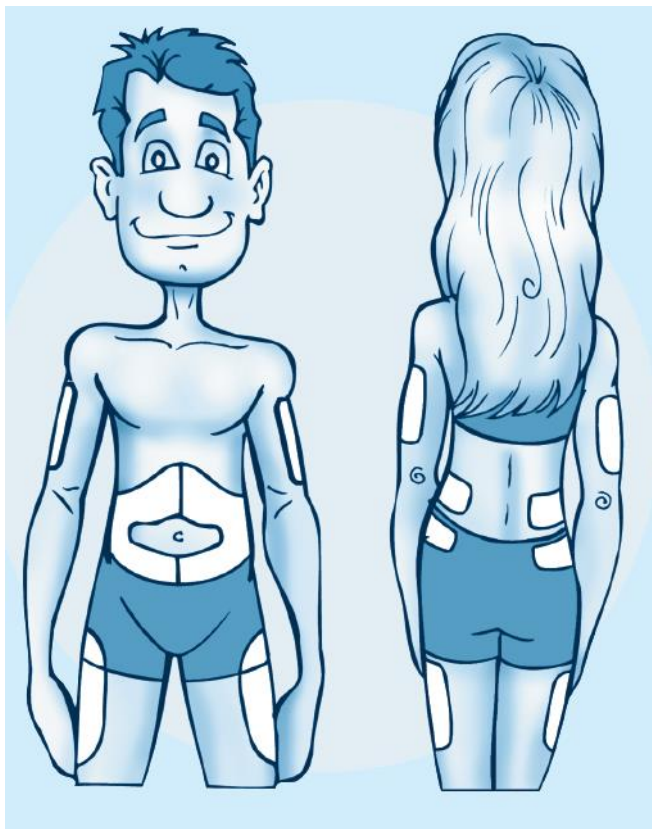


Step 8 - Inject



Step 9 - Dispose of the needle





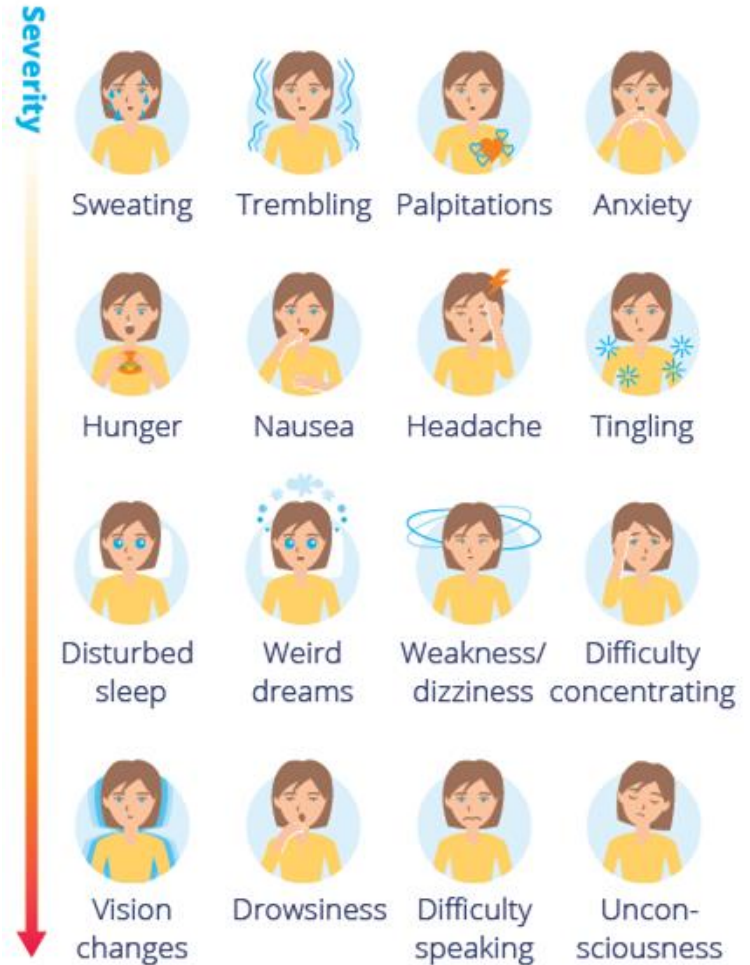
Site	Things to think about
Abdomen (tummy) Stay 2 inches (5 cm) away from your belly button	Easy to reach. Insulin absorbs fast and consistently.
Buttock and thigh	Slower absorption rate than from abdomen and arm sites.
Outer arm	After abdomen, arm provides the next fastest absorption rate. This area is hard to reach when injecting yourself, so it is often not recommended.

Hypoglycemia

What are the signs?

Each person will have their own way of recognizing low blood sugar.

Some of the signs include:



How to take action

EAT fast-acting sugar



15 g of glucose
in the form of
glucose tablets



1 tablespoon
(15 mL)
of honey



1 tablespoon
(15 mL)
sugar in water



2/3 cup (150 mL)
of juice or
regular soft drink



15 g fast-acting sugar
(e.g. 6 Life Savers® or
2 rolls Rocket Candy)



WAIT 15 minutes and CHECK



If blood sugar is **ABOVE** 4.0mmol/L
AND
next meal is **in the hour**



If blood sugar is **ABOVE** 4.0mmol/L
AND
next meal is **LONGER than 1 hour away**

If blood sugar is **BELOW** 4.0mmol/L
REPEAT
steps above



Eat ONE of:

Starch:

ex. 7 crackers OR 1 slice of bread

AND

Protein:

ex. 1 piece of cheese OR
2 tablespoons of peanut butter



+

+



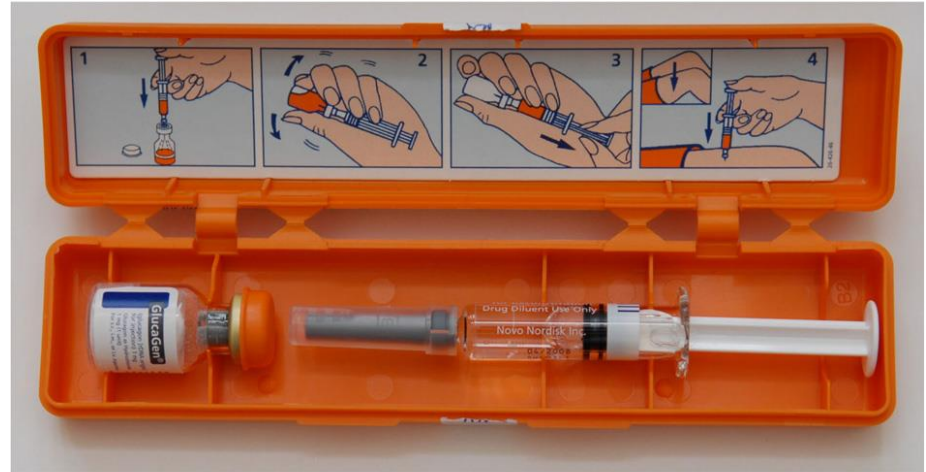
Are you Driving?

Glucagon

Used when the person you support (who uses insulin) either:

- Becomes unconscious due to low blood sugar
- Has low blood sugar and is unable or refusing to eat sugar, honey or orange juice

Use the Glucagon kit right away. Call 911 for emergency medical help immediately after using the kit.



<https://www.glucagenhypokit.com/caregivers.html>



Step 1. Check that the orange plastic cap on your vial of GlucaGen® is firmly attached. **Do not** use if the cap is loose or missing. With your thumb, flip the cap off the GlucaGen® vial.



Step 2. Pick up the prefilled syringe containing sterile water. **Do not use any other liquid to mix the medicine.** Hold the syringe with 1 hand. With your other hand, pull the needle cover off the syringe. **Do not** remove the plastic backstop from the syringe.



Step 3. Pick up the GlucaGen® vial of dry powder. Hold the vial with 1 hand. With your other hand, push the needle of the prefilled syringe through the center of the rubber stopper.



Step 4. Hold the vial and syringe together, with the needle still inserted into the vial. Carefully turn the vial and syringe together right side up. Slowly push the plunger down until the syringe is empty. **Do not take the syringe out of the vial.**



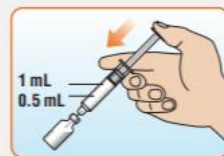
Step 5. Firmly hold both the vial and syringe together in one hand, and gently shake until the powder is completely dissolved. Do not use if a gel has formed, or if you see particles in the solution. **Do not take the syringe out of the vial.**



Step 6. With the needle still inserted into the vial, carefully turn the vial and syringe together upside down. Gently pull down on the plunger and slowly withdraw all of the liquid into the syringe. Do not pull the plunger out of the syringe.



Step 7. Keep the needle inside the vial. Check the syringe for air bubbles. If you see bubbles, tap the syringe until the bubbles rise to the top of the syringe. Gently push on the plunger to move only the air bubbles back into the vial.



Step 8. Hold the vial and syringe as shown.

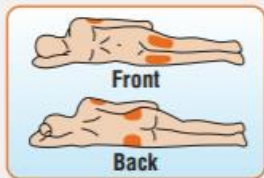
- The usual dose for adults and children who weigh more than 55 pounds (25 kg) is 1 mg (1 mL). Use the content of the full syringe (1 mL).
- The usual dose for children who weigh less than 55 pounds (25 kg) is 0.5 mg (0.5 mL). Gently push the plunger until it is at the 0.5 mL mark on the syringe to ensure there is 0.5 mL liquid left in the syringe.

Take the syringe and needle out of the vial when the correct dose of GlucaGen® is in the syringe.

If you do not know how much the child weighs:

- Give a child under 6 years of age 0.5 mg (0.5 mL).
- Give a child 6 years of age and older 1 mg (1 mL).

Steps for preparing glucagon



Step 9. Choose the injection site. Common injection sites for GlucaGen® are upper arms, thighs, or buttocks.



Step 10. With one hand gently pinch the skin at the injection site. With your other hand insert the needle into the skin and push the plunger down until the syringe is empty.

After Giving the GlucaGen® injection



Step 11. Pull the needle out of the skin and press on the injection site. Throw away your used syringe with the needle attached and any GlucaGen® you did not use. See **“How should I dispose of (throw away) used GlucaGen® prefilled syringes”** in the full Instructions for Use on the following pages.

Step 12. Turn the person on their side. When an unconscious person awakens, they may vomit. Turning the person on their side will lessen the chance of choking.

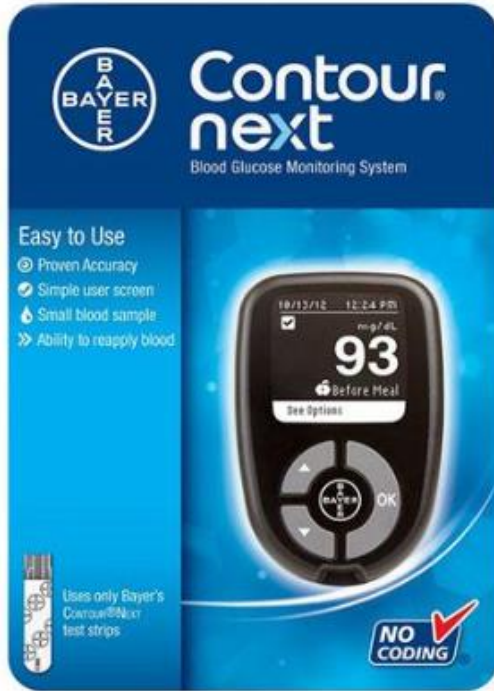
Step 13. Call for emergency medical help right away.

Step 14. Feed the person as soon as they are awake and able to swallow.

Give the person 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).

Step 15. Even if the GlucaGen® treatment wakes the person, tell their doctor right away. The doctor should be told whenever a severe drop in blood sugar (hypoglycemia reaction) happens. The person’s dose of diabetes medicine may need to be changed.

Glucometers



Contour Next

1. Turn on Meter
2. Obtain blood sample using Single-Let

Gray Square End —————

Insert this end into the test strip port

Sample Tip —————

Blood sample pulled in here



Freestyle Libre

Reader

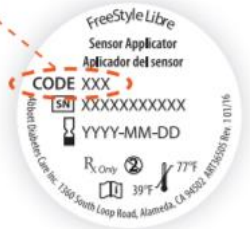


Sensor Applicator

Sensor Pack



Codes on labels must match



STEP 1



Select site on **back of upper arm**. Do not use other sites as these are not approved and may result in inaccurate glucose readings.

Note: Avoid scars, moles, stretch marks, lumps, and insulin injection sites. To prevent skin irritation, rotate sites between applications.

TIP: Select an area on the back of the upper arm that generally stays flat during normal daily activities (no bending or folding).

STEP 2



Clean site with alcohol wipe. **Allow site to dry completely before proceeding.**

TIP: The area **MUST** be clean and dry or the sensor may not stick to the site.

STEP 3



Peel lid completely off sensor pack. Unscrew cap from sensor applicator.

CAUTION: *Sensor codes must match on sensor pack and sensor applicator or glucose readings will be incorrect.*



STEP 4



Line up dark mark on sensor applicator with dark mark on sensor pack. On a hard surface, press down firmly on sensor applicator until it comes to a stop and you hear an audible click.

TIP: Assemble on a hard surface, such as a table.

STEP 5



Lift sensor applicator straight out of sensor pack.

STEP 6



Sensor applicator is ready to apply sensor.

CAUTION: *Sensor applicator now contains a needle. Do not touch inside sensor applicator or put it back into sensor pack.*

STEP 7



Place sensor applicator over site and push down firmly to apply sensor.

CAUTION: *Do not push down on sensor applicator until placed over prepared site to prevent unintended results or injury.*

TIP: For video of sensor application, visit <https://www.myfreestyle.com/provider/resources>

STEP 8



Gently pull sensor applicator straight down and away from your body.

STEP 9



Make sure sensor is secure by gently pressing adhesive to the skin. Discard used sensor applicator and sensor pack according to local regulations.

Epi-Pen

EpiPen should be injected at the first sign of a severe allergic response.

Symptoms of a severe allergic reaction can occur suddenly within *minutes or several hours* after exposure to an allergy trigger:

The most common warning symptoms of anaphylaxis are:

- Swelling
- Hives



<https://www.epipen.ca/>

Signs and Symptoms of Anaphylaxis



Mouth: Swelling of the lips or tongue, metallic taste, itching.



Throat: Swelling, itching, difficulty swallowing.



Skin: Swelling around the eyes, hives, flushing, itching, redness, paleness.



Gut: Cramps, nausea, vomiting, diarrhea.



Lung: Difficulty breathing, wheeze, cough.



Heart: Increased heart rate, decreased blood pressure, chest pain, irregular heart beat.

Overall: Sudden feeling of weakness, feeling faint, anxiety or an overwhelming sense of doom, collapse, loss of consciousness.

Blue to the sky. Orange to the thigh.

How to use EpiPen® and EpiPen Jr® Auto-Injectors.

Remove the EpiPen® Auto-Injector from the carrier tube and follow these 2 simple steps:



- Grasp with orange tip pointing downward
- **Remove blue safety cap by pulling straight up**
– do not bend or twist



- Place the orange tip against the middle of the outer thigh
- **Swing and push the auto-injector firmly into the thigh until it “clicks”**
- Hold in place for 3 full seconds



Built-in needle protection

- After injection, the orange cover automatically extends to ensure the needle is never exposed.

After using EpiPen®, you must seek immediate medical attention or go to the emergency room. For the next 48 hours, you must stay close to a healthcare facility or be able to call 911.



Trusted for over 25 years.

Inhalers

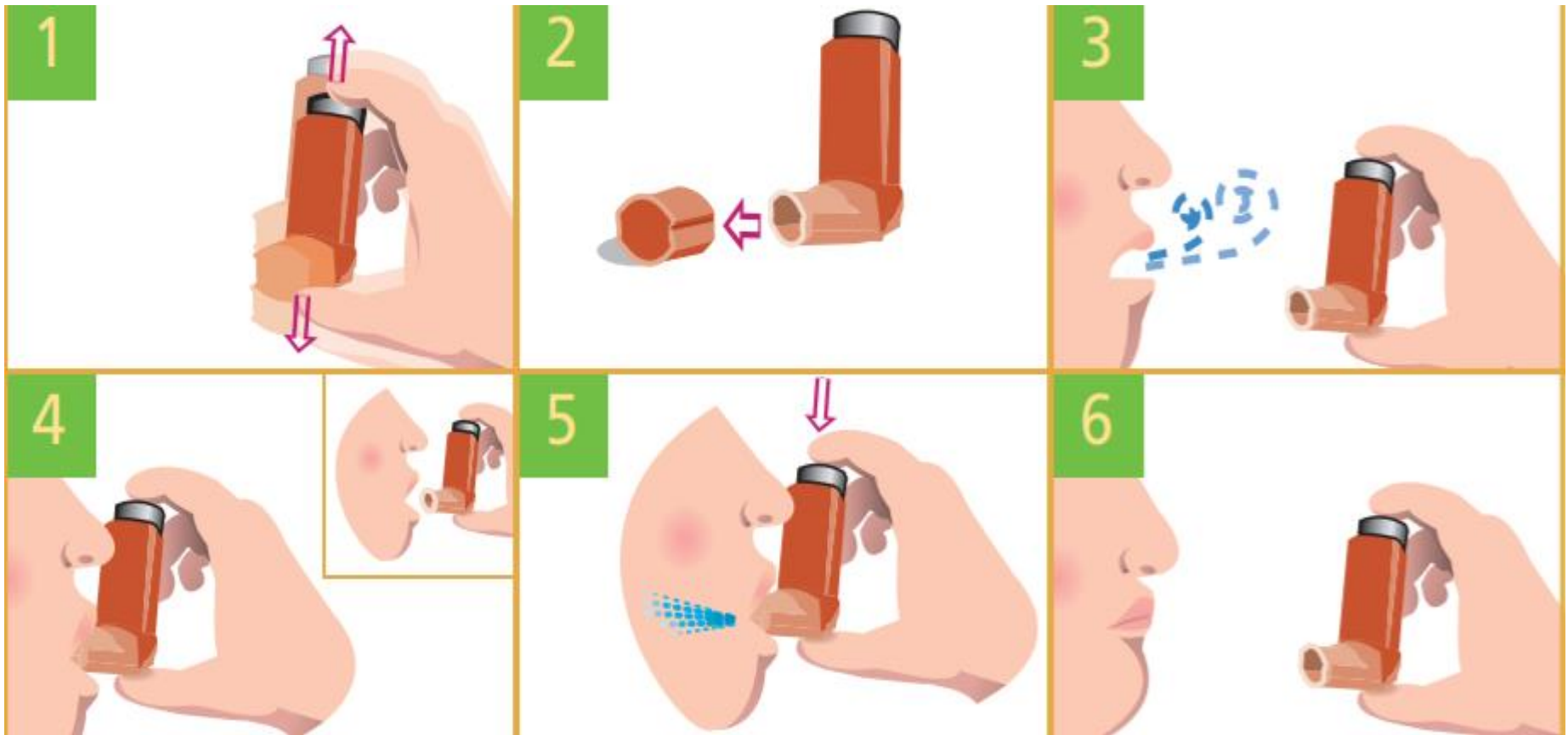
1. Metered-Dose Inhalers
2. Metered-Dose Inhalers with Spacer
3. Diskus
4. Turbuhaler
5. Handihaler
6. Respimat
7. Ellipta
8. (*Breezhaler*)
9. (*Genuair*)

Metered-Dose Inhalers (MDIs)

1. Shake the puffer well before use (three or four shakes)
2. Remove the cap
3. Breathe out, away from the puffer
4. Bring the puffer to the mouth. Place it in the mouth between the teeth and close the mouth around it
5. Start to breathe in **slowly**. Press the top of the puffer once, and keep breathing in slowly until a full breath is taken
6. Remove the puffer from the mouth, and hold the breath for about 10 seconds, then breathe out



If you need a second puff, wait 30 seconds, shake the inhaler again, and repeat steps 3-6.



Using a MDI

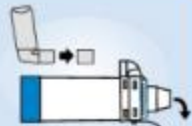
MOUTHPIECE

1



Carefully examine the product for damage, missing parts or foreign objects. Remove any foreign objects prior to use. The product should be replaced IMMEDIATELY if there are any damaged or missing parts. If necessary, use the Metered Dose Inhaler (MDI) alone until a replacement is obtained. If the patient's symptoms worsen, please seek immediate medical attention.

2



Remove cap(s) from the MDI and chamber (if applicable).

3



Shake the MDI immediately before each use as per the instructions supplied with the MDI.

4



Insert the MDI into the Backpiece of the chamber.

Flow-Vu® Inspiratory Flow Indicator

5



Put mouthpiece into mouth and close lips around it to ensure an effective seal. The **Flow-Vu®** Inspiratory Flow Indicator (IFI) only moves if the patient has a good seal.

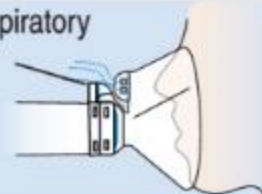


Apply mask to face and ensure an effective seal. The **Flow-Vu®** Inspiratory Flow Indicator only moves if a good seal is created.

LARGE MASK



Flow-Vu® Inspiratory Flow Indicator



Using MDI with Spacer

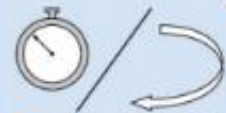
6



Breathe out gently and press the MDI at the beginning of a slow inhalation. Use the **Flow-Vu**® IFI to assist in the coordination of this step. Breathe in slowly and deeply through the mouth until a full breath has been taken. Hold breath for 5 – 10 seconds, if possible. Otherwise, keep lips tight on the mouthpiece breathing normally 2 – 3 times through the chamber after the MDI is pressed. *Slow down inhalation if you hear the **FlowSignal**® Whistle sound.* It means you are inhaling too quickly. **Administer one (1) puff at a time.**

Breathe out gently and press the MDI at the beginning of a slow inhalation as the **Flow-Vu**® IFI moves towards you. Use the **Flow-Vu**® IFI to count breaths. Maintain seal for 5 – 6 breaths after the MDI is pressed. *Slow down inhalation if you hear the **FlowSignal**® Whistle sound.* It means you are inhaling too quickly. **Administer one (1) puff at a time.**

7



Follow instructions supplied with the MDI on how long to wait before repeating steps 3 – 6 as prescribed.

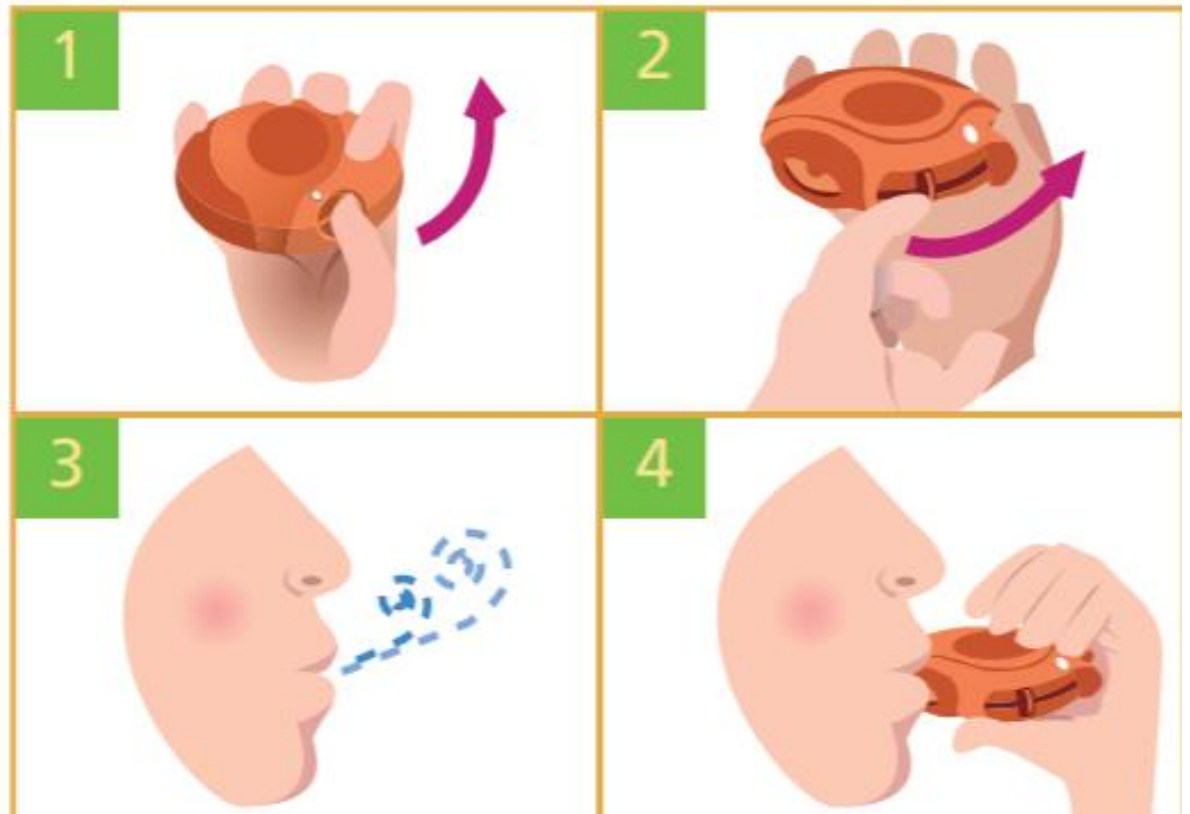
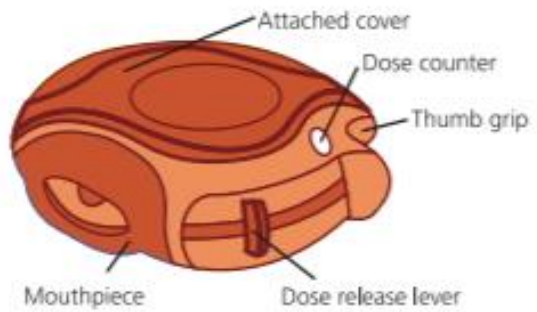


Using MDI with Spacer

Diskus

1. To Open: Hold it in the palm of your hand, put the thumb of your other hand on the thumb grip and push the thumb grip until it “clicks” into place
2. Slide the lever until you hear a click. The medication is now loaded
3. Breathe out away from the device
4. Place the mouthpiece gently in the mouth and close the lips around it
5. Breathe in deeply until a full breath is taken
6. Remove the DISKUS® from the mouth
7. Hold the breath for about ten seconds, then breathe out slowly

If you drop the DISKUS or breathe into it after its dose has been loaded, you may cause the dose to be lost. If either of these things happens, reload the device before using it.



Using a Diskus

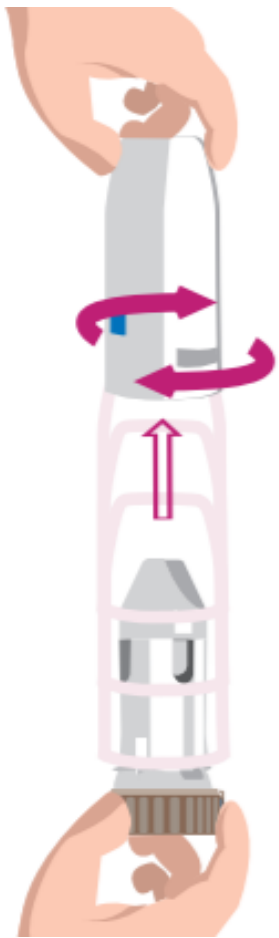
Turbuhaler



1. Unscrew the cap and take it off. Hold the inhaler upright
2. Twist the coloured grip of the Turbuhaler as far as it will go. Then twist it all the way back. You have done it right when you hear a “click”
3. Have the PWS breathe out away from the device
4. Put the mouthpiece between the teeth, and have them close their lips around it. Breathe in forcefully and deeply through your mouth
5. Remove the Turbuhaler from the mouth before breathing out
6. Always check the number in the side counter window under the mouthpiece to see how many doses are left. For the Turbuhalers that do not have a dose counter window, check the window for a red mark, which means your medication is running out. When finished, replace the cap.

If you drop the Turbuhaler or breathe into it after its dose has been loaded, you may cause the dose to be lost. If either of these things happens, reload the device before using it.

1



2



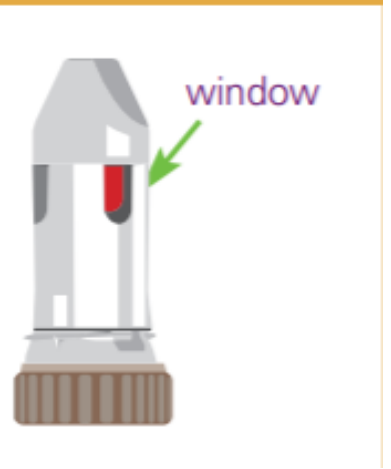
3



4/5



6



Using a Turbuhaler

Ellipta

Only open the cover once you are ready to take a dose. If you open and close the cover without inhaling the medicine, the dose will be lost.

Click



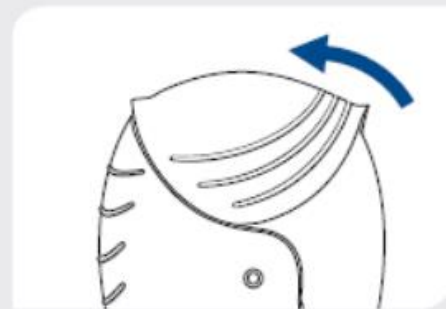
- Slide the cover down until you hear a 'click'
- While holding the inhaler away from your mouth, breathe out as far as is comfortable

Inhale



- Put the mouthpiece between your lips, and close your lips firmly around it
- Take one long, steady, deep breath in and hold this breath for at least 3-4 seconds

Close

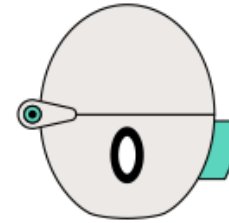


- Remove the inhaler from your mouth and breathe out slowly and gently
- Slide the cover upwards as far as it will go to cover the mouthpiece

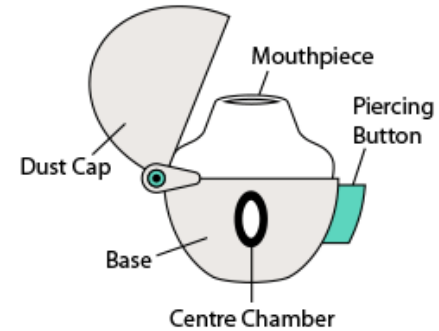
Handihaler

- Open cap
- Open mouthpiece
- Peel back foil, remove capsule and put capsule in chamber
- Close mouthpiece until it clicks
- Press green piercing button in once and release (Do not shake).
- Breathe out gently (away from inhaler)
- Put mouthpiece between teeth (without biting) and close lips to form good seal
- Breathe in slowly and deeply, so capsule vibrates

HandiHaler



RiverPharmacy.ca



- Keep breathing in as long as comfortable
- While holding breath, remove inhaler from mouth
- Breathe out gently (away from inhaler)
- Repeat steps 7 - 11 to take the full dose
- Open mouthpiece and remove used capsule
- Close mouthpiece
- Close cap

Respimat



TURN

- Keep cap closed
- Turn base in direction of the arrows on label until you hear a click



OPEN

- Open the cap until snaps fully open
- Breathe out slowly and fully



PRESS

- Close your lips around the mouthpiece without covering the air vents
- While taking a **slow**, deep breath through your mouth, press the dose-release button and continue to breathe in
- Hold your breath for 10 seconds or as long as comfortable, then breathe out
- Repeat Turn, Open, Press for a total of 2 puffs

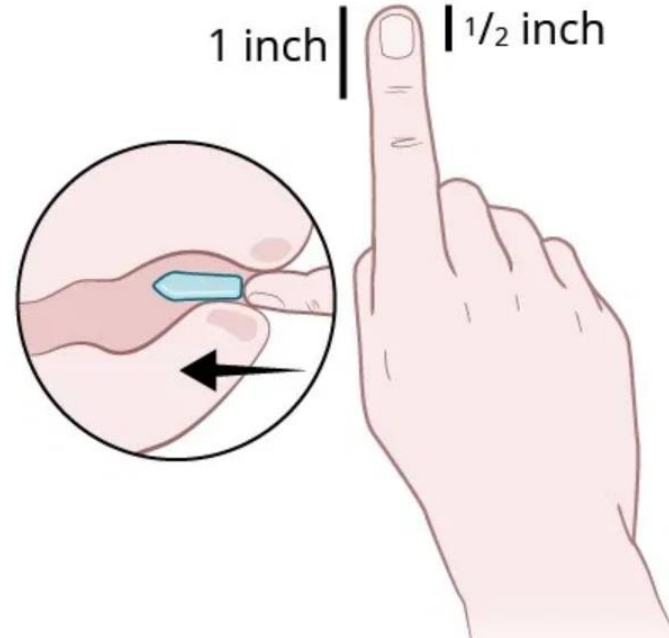
Suppositories

1. Wash your hands thoroughly with soap and water
2. Put on gloves
3. Unwrap and lubricate the suppository
4. Have the PWS lie on their side with the lower leg straightened out and the upper leg bent towards their stomach



Suppositories

5. Lift the upper buttock to expose the rectal area
6. Insert the pointed end of the suppository with your finger 1 inch into the rectum
7. Hold the buttocks together for a few seconds
8. Have the PWS stay lying down for about 5 minutes
9. Discard materials and wash your hands



Enemas

How to Use an Enema Safely

- 1 Remove cap from the tip of enema nozzle



- 2 Apply petroleum jelly to the anus to ease insertion



- 4 Gently insert tip of enema nozzle into the rectum



- 5 Squeeze enema container to empty all contents into the rectum



- 7 Stay close to a toilet for 30 to 60 minutes after use, call your doctor if you feel any pain



- 3 Lie on your side with your knee bent, placing a towel under your knee for support



- 6 Withdraw the nozzle and wait recommended time before evacuating bowels



Nasal Sprays



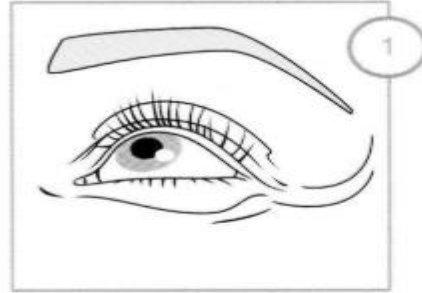
© 2000 Kathryn Born

1. Gently blow your nose to clear it of mucus before using the medicine.
2. Remove the cap. Shake the bottle. The first time you use the pump spray each day, you may have to “prime” it, squirting a few times into the air until a fine mist comes out.
3. Tilt your head forward slightly. Breathe out slowly.
4. Hold the pump bottle with your thumb at the bottom and your index and middle fingers on top. Use a finger on your other hand to close your nostril on the side not receiving the medicine (see the drawing below).
5. Squeeze the pump as you begin to breathe in slowly through your nose. Repeat these steps for the other nostril. If you are using more than one spray in each nostril, follow steps 2 through 5 again.

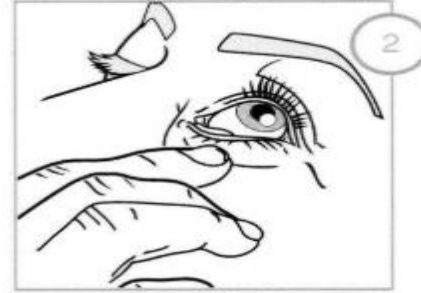
Eye Drops

Always wash your hands before applying eye drops, then follow these simple steps:

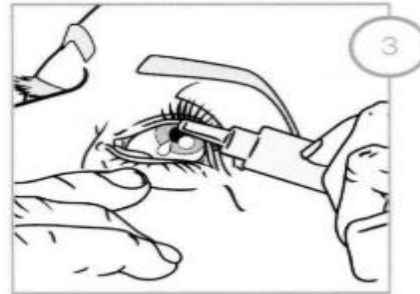
This method applies to dropper bottle or unit dose vials.



Tilt your head back and look at the ceiling



Gently pull down the lower eyelid until there is a small pocket



Squeeze the upturned dropper bottle or vial to release a drop into your eye

Do not allow the bottle or vial to touch your eye or any other surface

Naloxone

1

**Identify
Opioid
Overdose**



**Call for
Emergency
Medical Help**

2

**Give
NARCAN™
Nasal
Spray**



Check for signs of an opioid overdose:

- Person DOES NOT wake up after you shout, shake their shoulders, or firmly rub the middle of their chest
- Breathing is very slow, irregular or has stopped
- Centre part of the eye is very small, like a pinpoint

Call 911 or ask someone to call for you.

Lay the person on their back.

Remove device from packaging. **Do not test the device.** There is only one dose per device.

Tilt the person's head back and provide support under their neck with your hand.

Hold the device with your thumb on the bottom of the plunger. Put your first and middle fingers on either side of the nozzle.

Gently insert the tip of the nozzle into one nostril. Your fingers should be right up against the nose. If giving to a child, make sure the nozzle seals the nostril.

Press the plunger firmly with your thumb to give the dose.

Remove the device from the nostril.

Naloxone

3

**Evaluate
and
Support**



Move the person on their side (recovery position).
Watch them closely.

Give a second dose after 2 to 3 minutes if the person has not woken up or their breathing is not improved.
Alternate nostrils with each dose.

You can give a dose every 2 to 3 minutes, if more are available and are needed.

Perform artificial respiration or cardiac massage until emergency medical help arrives, if you know how and if it is needed.