

Epinephrine Auto-Injector



Overview

- EpiPen's Actions
- Indications
- Contraindications
- Dosage and Administration
- Side Effects
- Facts about the EpiPen's

Epinephrine Auto-Injector (EpiPen)

- Epinephrine (Generic Name)
- Adrenalin (Trade Name)
- Other Names:
 - EpiPen
 - EpiPen Jr.
 - Twinject

Epinephrine Auto-Injector (EpiPen)

- Actions:
 - Epinephrine is a natural hormone released in response to stress
 - It is a natural “antidote” to the chemicals released during severe allergic reactions triggered by drug allergy, food allergy, or insect allergy
 - Quickly constricts blood vessels to improve blood pressure
 - Relaxes smooth muscles in the bronchioles to improve breathing and alleviate the wheezing and SOB
 - Stimulates the heartbeat, and works to reverse the swelling and hives

Epinephrine Auto-Injector (EpiPen)

- Indications:
 - The two key categories of signs and symptoms that specifically indicate anaphylaxis are:
 - Respiratory Compromise
 - » Airway occlusion
 - » Breathy difficulty or inadequate breathing with possible wheezing, stridor, or crowing
 - Shock
 - » Absent or weak pulses
 - » Rapid heartbeat
 - » Decreased blood pressure
 - » Deteriorating mental status

This patient needs immediate intervention and administration of epinephrine if possible!

Epinephrine Auto-Injector (EpiPen)

- Contraindications:
 - There are NO contraindications for the administration of epinephrine in a life-threatening allergic reaction



DISPATCH - SHOW US CLEAR THE ER... OH, AND WOULD YOU MIND LETTING THE PATIENT KNOW WE JUST FOUND HIS MISSING EPI PENS?

Epinephrine Auto-Injector (EpiPen)

- Epinephrine is a liquid drug contained within an auto-injector that is designed to automatically inject a precise dose when the safety cap is removed and the auto-injector is pressed firmly against the thigh
- Epinephrine takes effect within seconds, but the duration of its effectiveness is short, about 10 to 20 minutes

Epinephrine Auto-Injector (EpiPen)

- Dosage:
 - Both the adult and pediatric auto-injectors deliver a single dose of epinephrine
 - Adult: 0.3mg of Epinephrine
 - Child: 0.15mg of Epinephrine
- It may be necessary in very severe reactions to administer a second dose
- Consult with medical direction before any additional dose beyond the first is administered

Administration for the EpiPen Auto-Injector

- 1) Remove the device from the protective container



- 2) Remove the GREY cap (Never put finger, thumb, or hand over the black tip)



This “arms the unit” ready for use

Administration for the EpiPen Auto-Injector

3) Hold the EpiPen in your fist with clenched fingers wrapped around it



4) Place the BLACK Tip gently against the skin of the mid thigh, then start to push harder until a loud “click” is heard

This means the device has been activated

5) Hold in place for 10-15 seconds while the Adrenaline is injected under pressure

Administration for the EpiPen Auto-Injector

- 6) Remove the EpiPen from the thigh; be careful with the needle that will now be projecting from the EpiPen when you dispose of the device
- 7) Massage in the Adrenalin (There may be some slight bleeding at the injection site)
- 8) Apply firm pressure with a bandage
- 9) Record the time that the EpiPen was administered
- 10) Dispose of the used EpiPen carefully into a sharps container, or hand to the ambulance personnel once they arrive (GENTLY)

Twinject Epinephrine Auto-Injector

- Delivers two doses, the first one automatically, the second manually
- Has complete set of instructions on the auto-injector for each dose
- Very convenient if patient requires second dose




Twinject Epinephrine Auto-Injector Directions

PATIENT DIRECTIONS

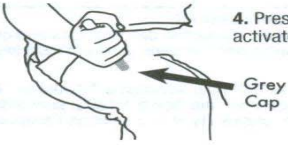
STEP 1 — MAKE SURE THAT THE MEDICINE IS READY
 Look at Twinject™ 0.3 mg or Twinject™ 0.15 mg regularly. It may not work if medicine looks cloudy (has particles), pinkish or more than slightly yellow, or if the expiration date has passed. In the event of a life-threatening allergic reaction, you should use an out of date product, if that is all you have. Do **NOT** remove the GREEN or the RED cap until you are ready to use.

STEP 2 — FIRST DOSE

- PULL off GREEN end cap [1] to see a GREY cap. **Never put thumb, finger, or hand over the GREY cap.**
- PULL off RED end cap [2].

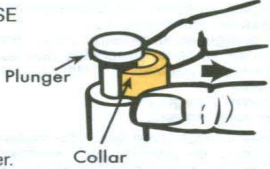


- Place GREY cap against mid-thigh (can go through clothes).
- Press down firmly until auto-injector activates—hold while slowly counting to ten.
- Remove auto-injector and check the GREY cap; if needle is exposed, you received the dose. If not, repeat #3 and #4 under step 2. Prepare for second dose. **Get emergency medical help right away.**



STEP 3 — PREPARE FOR A SECOND DOSE

- Unscrew and remove GREY cap. **Beware of exposed needle.**
- Holding BLUE hub at needle base, remove syringe from barrel.
- Slide YELLOW (Twinject™ 0.3 mg) or ORANGE (Twinject™ 0.15 mg) collar off plunger.
- PAUSE HERE.** If symptoms have not improved in approximately 10 minutes since first injection, proceed with Step 4.




STEP 4 — INJECT SECOND DOSE

- Insert needle into mid-thigh.
- Push plunger down completely.

Get emergency medical help right away.

SYRINGE DISPOSAL: Re-insert syringe, needle first, into case. Return it to your physician or pharmacist for proper disposal. **Do not throw away in trash.**



Epinephrine Injection, USP (1:1000) manufactured by Hospira, Inc., Lake Forest, IL 60045 USA

EpiPen Common Mistakes

The black tip contains the needle, holding it on the wrong end is painful and not very effective



Unless the grey cap is removed, the EpiPen will NOT work, no matter how hard you push



Exerting pressure on the WHITE end, assuming there is a button. Unless pressure is exerted at the BLACK end, the EpiPen will not work!



Epinephrine Auto-Injector (EpiPen)

- Side Effects:
 - Increased heart rate
 - Pale skin
 - Dizziness
 - Chest Pain
 - Headache
 - Nausea and vomiting
 - Excitability and anxiousness

Epinephrine Auto-Injector (EpiPen)

- Reassessment:
 - Continually reassess airway, breathing, and circulatory status
 - Look for signs that the allergic reaction is worsening
 - Decreased mental status
 - Decreasing blood pressure
 - Increased difficulty in breathing
 - Be prepared to administer a second dose of Epinephrine if available
 - Continue with high flow oxygen (NRB)
 - Treat for shock (if necessary)
 - Record and document your interventions and reassessment findings, very important when administering medications!!
 - Baseline vital signs should be checked and documented every 5 minutes

Epinephrine Auto-Injector (EpiPen)

- *Never underestimate the severity of an allergic reaction, because death can occur within minutes*
- *Do not mistake anaphylaxis for other conditions with similar signs and symptoms, such as Hyperventilation, Anxiety Attacks, Alcohol Intoxication, or Hypoglycemia*



Conclusion

- EpiPen's Actions
- Indications
- Contraindications
- Dosage and Administration
- Side Effects
- Reassessment
- Facts about the EpiPen's

ANY QUESTIONS?

