

Epinephrine Auto-Injector

All content must be TAUGHT by nurses or staff with current DODD Category 1 Certification. TEACH do not give to students to just read.

Goal: To teach DD personnel how to administer an epinephrine auto-injector (EAI).



Objectives:

By the end of this session DD personnel will be able to:

Recall at least 3 signs of a severe allergic reaction.

State that a prescribed epinephrine auto-injector (EAI) that has not expired MUST be available at all times.

State that if the fluid in the window of the epinephrine auto-injector (EAI) is cloudy, pinkish or brown in color, or not visible in the window, the auto-injector cannot be used.

Demonstrate the use of, or assist with the use of, an epinephrine auto-injector in case of an allergic reaction.

Explain why personnel must call 911 after the epinephrine auto-injector has been used.

State the need to use a second injector in 5 minutes after the initial injection if the reaction continues.

Explain why the epinephrine auto-injector MUST be restocked immediately after it has been used.

Explain why the epinephrine auto-injector is never thrown away after use, but given to the EMS personnel upon their arrival.

State how to document administration of the use of an EAI.

You can get pretend epinephrine auto-injectors (trainers) to train with from the manufacturer. Go to www.epipen.com. Look for the link to order EpiPen® trainers.

EpiPen® / EpiPen Jr® Auto-Injectors

EpiPen® Auto-Injector 0.3mg (yellow label) removed from carrier tube



EpiPen Jr® Auto-Injector 0.15mg (green label) removed from carrier tube



Definition of Terms (Terminology)

Allergen – Anything that causes an allergic reaction.

Allergic reaction - Sensitivities to substances called **allergens** that come into contact with the skin, nose, eyes, respiratory tract, and digestive tract. Allergens can be breathed into the lungs, swallowed, touch the skin, or be from a bug bite or sting.

Anaphylaxis – Severe, life-threatening allergic reaction that affects the airway and other parts of the body.

Anxious - Feeling worried, uneasy, nervous, or expressing a feeling that something is not right.

Asthma - A disorder of the lungs causing breathing problems due to swell in the airways as a result of an allergic reaction or other causes.

EAI (epinephrine auto-injector) - Abbreviation for epinephrine auto-injector as used in this training.

Eczema – A disorder characterized by patches of rough, inflamed, itchy skin. It may or may not be caused by an allergic reaction - the cause is often not known.

EMS – Emergency Medical Service. Sometimes referred to as emergency squad, 911 or ambulance.

Epinephrine - A hormone (also known as adrenaline). It occurs naturally in the body and can be used as a medication to treat severe, life-threatening allergic reactions.

Epinephrine auto-injector (EAI) – A device used to automatically inject a pre-measured dose of epinephrine into the muscle for treatment of a severe allergic reaction (anaphylaxis).

Fatal – Causing death.

Flushing – When areas on the skin become red and hot – often seen on the cheeks, face and ears.

Hives – A skin outbreak characterized by red, raised, itchy areas with pale centers and well-defined red margins; usually the result of an allergic reaction to insect bites, plants, food or drugs.

Hoarseness – Voice that sounds weak, breathy, scratchy, or husky.

Rashes – Reddened areas on a person's skin, sometimes with raised spots; it is often a classic sign of an allergic reaction.

Wheezing - Breathing with a whistling or rattling sound in the chest, as a result of swelling in the airways.

Why do people have a prescription for epinephrine auto-injectors?

They have a history of an allergic reaction to something. Things people commonly develop allergies to include:

- ◀ Bug bites/bee stings
- ◀ Shell fish
- ◀ Peanuts
- ◀ Bananas
- ◀ Latex
- ◀ Strawberries
- ◀ Antibiotics
- ◀ Grasses
- ◀ Garlic

What are the signs of anaphylaxis (severe allergic reaction)?

- ◀ Severe itching
- ◀ Skin rash, redness
- ◀ Trouble breathing
- ◀ Fainting (passing out)
- ◀ Feeling very anxious
- ◀ Hives
- ◀ Fast heart beat
- ◀ Wheezing
- ◀ Dizziness
- ◀ Confusion
- ◀ Swelling of the face, lips, mouth or tongue
- ◀ Weak pulse
- ◀ Hoarseness
- ◀ Stomach pain



Why would you use an epinephrine auto-injector (EAI)?

To treat a person for exposure to allergens **before** the person develops symptoms that could be fatal. Common examples of allergens are listed above. People with a history of severe allergic reactions to something, are at high risk for becoming allergic to other things. Anything can become an allergen.

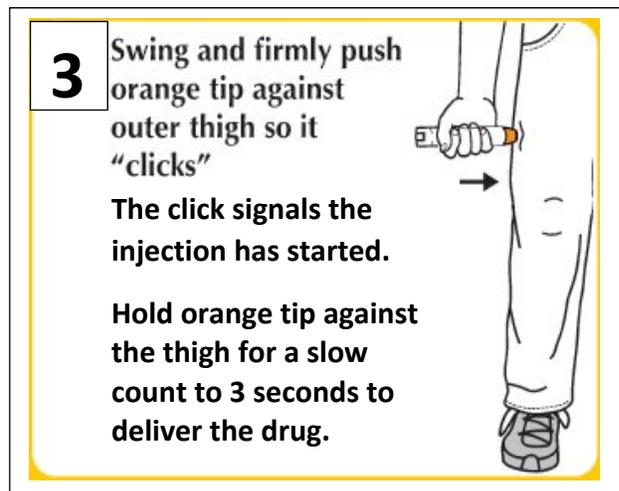
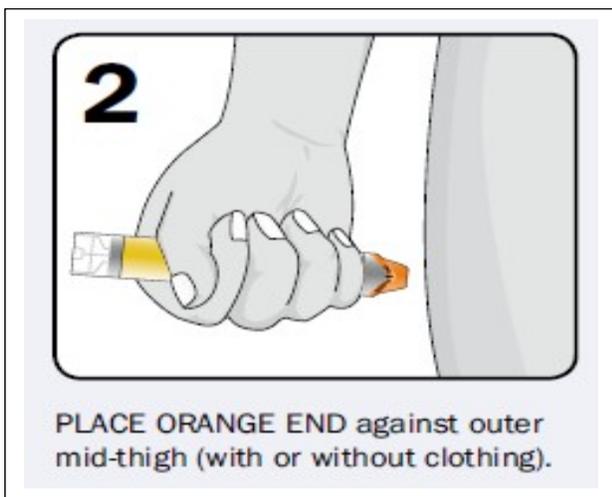
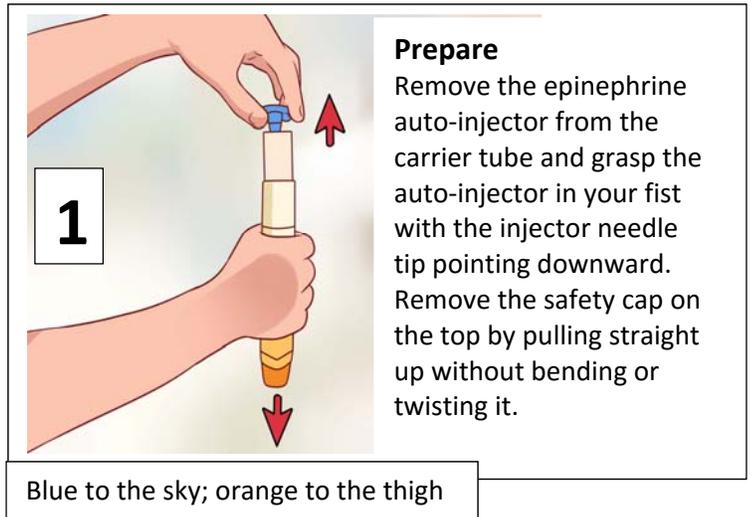
When would you use an epinephrine auto-injector (EAI)?

- ◀ Immediately when a person is exposed to a known allergen. Do NOT wait for symptoms to appear. Use the auto-injector to prevent the symptoms.
- ◀ Anytime a person begins to show signs of anaphylaxis, use their epinephrine auto-injector. You do not need to know what the person is reacting to. Treat the reaction.
- ◀ Give the EAI **before** you take your time to call 911. If someone else is around, have them call 911 while you administer the epinephrine auto-injector.

Important Information You Must Remember **BEFORE** Using an EAI

- ◀ Staff must receive Individual Specific Training (IST) before administering an EAI to the person.
- ◀ A person for whom an EAI is prescribed, should always carry it with them. It is impossible to predict when or where a person might have an exposure to an allergen resulting in an anaphylactic reaction.
- ◀ Read the instructions that come with the EAI as part of Individual Specific Training. The auto-injector may look different, but they all work the same.
- ◀ Each injector holds only one dose.
- ◀ The availability and usability of the epinephrine auto-injector (EAI) must be confirmed every time a person moves between settings, support personnel, or is transported.
 - ✓ Check that the EAI is available
 - ✓ Check the expiration date on the EAI
 - ✓ Look at the window to see if the liquid is clear
 - ✓ Immediately get a replacement for an EAI that is expired or has pink, brown or cloudy liquid or no visible liquid in the window.
- ◀ **Do NOT put the EAI in the refrigerator.** This can cause the epinephrine auto-injector to malfunction.
- ◀ **Do NOT** expose the EAI to **direct sunlight**. This can cause the epinephrine to go bad (the liquid will look pink, brown or cloudy).
- ◀ **Do NOT** expose the EAI to **extreme heat**. Never leave the EAI in the glove compartment or trunk of a car. This can cause the epinephrine to go bad (the liquid will look pink, brown or cloudy).
- ◀ There is a window where you can see the medicine in the injector. **Do not use the injector if the liquid in the window is not clear.** If the liquid in the window is pink, brown or cloudy or not visible, get a new injector immediately.
- ◀ **Do NOT** put paper or any other object in the carrier tube with the EAI. That may keep you from getting the auto injector out quickly when needed.
- ◀ **Do NOT** store within reach of children or others that may misuse it.

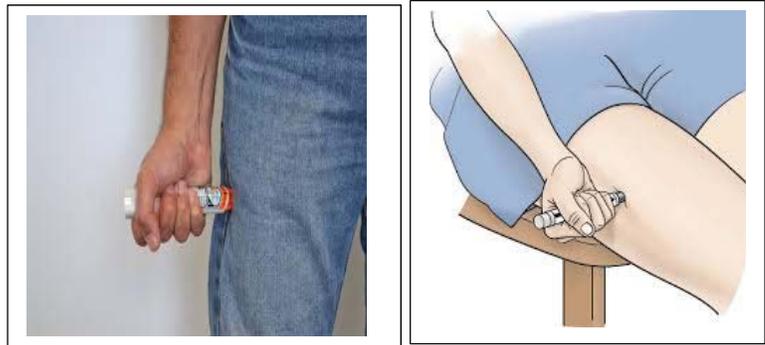
Steps to Follow for Giving EpiPen® Brand epinephrine auto-injector – Read manufacturer's instructions for all other brands



Important Information You Must Remember **WHEN** Using an EAI (epinephrine auto-injector)

- ◀ Gloves are optional. If available, put them on. If not available, activate and use the auto-injector anyway.
- ◀ The EAI is specially made to go through clothing. **Do NOT** remove a person's clothing to use the auto-injector.

- ◀ Have someone help you hold the leg still if the person cannot hold own leg still.



- ◀ Be very careful to look at how you are holding the EAI when getting ready to inject the epinephrine. Double check you are holding the EAI so that all your fingers and thumb are around the tube and not covering either end.

- ◀ Only inject the epinephrine into the middle of the outer thigh (upper leg). **NEVER PLACE THE EAI ON ANY OTHER PART OF THE BODY. INJECT ONLY INTO THE UPPER THIGH.**

- ◀ Remember to hold the auto-injector tight against the leg for a slow count to 3. Count ("1-1000," "2-1000," "3-1000."). This assures the full dose of epinephrine has been delivered.

- ◀ It is normal for most of the medicine to stay in the injector after the auto injection has been given. The injector gives the correct amount needed.

- ◀ Remove auto-injector from thigh. The orange tip will extend to cover the needle. If the needle is visible, **DO NOT** attempt to reuse it.

- ◀ Massage the injection area for 10 seconds.

- ◀ Note the time you gave the injection.

- ◀ **Give EAI BEFORE calling 911.** If someone else is around, have them call 911 while you administer the EAI.

- ◀ **DO NOT EVER** attempt to drive the person to the emergency room yourself after using the EAI. **ALWAYS** call 911 to send a squad (ambulance) to you.



Important Information You Must Remember **AFTER** Using the EAI

- ◀ If the person's symptoms are still present 5 minutes after receiving epinephrine from an auto-injector, **give a second injection** with a **new** EAI (epinephrine auto-injector). **Never reuse an EAI.**
- ◀ If symptoms return before EMS arrives, give a second injection with a new EAI. **Never reuse an EAI.**
- ◀ You will **NEVER** give more than 2 injections for any single reaction. EMS will give additional treatment as needed.
- ◀ If you accidentally puncture yourself with the person's EAI, get medical help right away.
- ◀ The effects of the epinephrine wear off after 10-20 minutes, this is why the person must get emergency medical help immediately after the epinephrine has been injected.
- ◀ Do not throw away the EAI after using it. When EMS arrives, hand them the EAI so they can see what you gave.
- ◀ Be sure to notify the person's Healthcare Professional (family doctor, Allergist) any time you use the EAI.

Risks and Side Effects (SEs) Associated with Use of an EAI

- ◀ Common SEs that should go away with rest include:
 - ✓ Fast, irregular or pounding heart beat
 - ✓ Sweating
 - ✓ Headache
 - ✓ Weakness
 - ✓ Upset stomach or vomiting
 - ✓ Shakiness
 - ✓ Dizziness
 - ✓ Feelings of over excitement
 - ✓ Nervousness
 - ✓ Anxiety
- ◀ Contact a healthcare professional if any of the signs of common side effects to the epinephrine do not go away.
- ◀ Infection. Signs of possible infection a few days after the injection include:
 - ✓ Redness at injection site that does not go away
 - ✓ Swelling
 - ✓ Tenderness
- ◀ If the person moves their leg during the injection, there is a risk of:
 - ✓ Needle scratches
 - ✓ Bent needles
 - ✓ A needle that stays in the skin after the injection

Staff responsibility if person self-administers their own epinephrine auto-injector

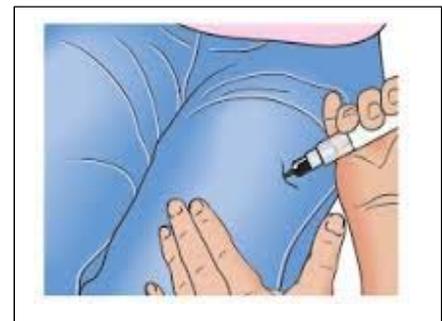
When a person is known to be able to self-administer the EAI

- ◄ Provide any assistance listed in the Individual's Service Plan (ISP).
- ◄ Be prepared to help if needed
 - ◆ Remind them to use the EAI if they have symptoms of an allergic reaction.
 - ◆ Help get the EAI from storage.
 - ◆ Stand behind the person and be ready to offer hand-over-hand assistance (only if needed).
- ◄ Call 911 while the person is using their EAI or after you have helped them.
- ◄ Stay with the person until EMS arrives and share any information about the incident that is helpful.
- ◄ Complete an incident report and notify the appropriate people.



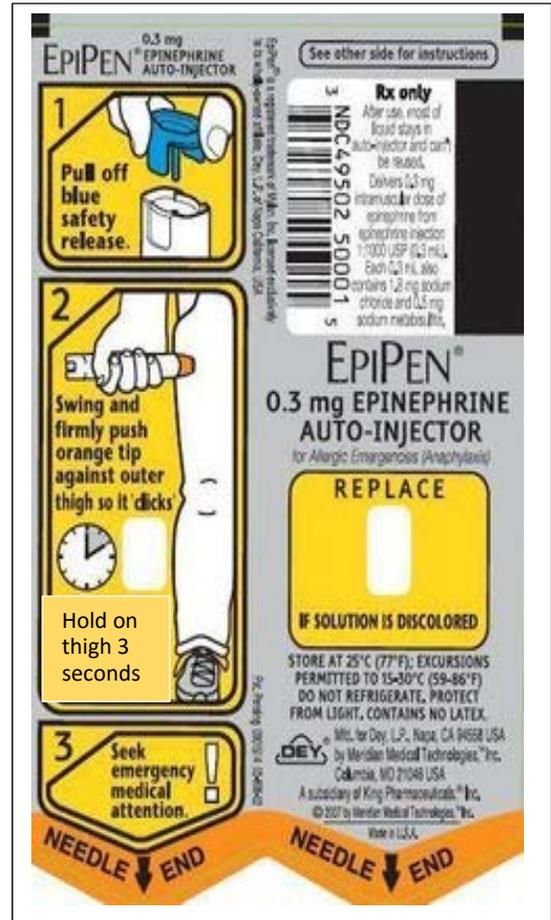
Staff responsibility when staff administers an EAI (epinephrine auto-injector) to the individual

- ◄ Check location of auto-injector upon arrival at work, upon transfer of person from one staff to another, if transporting person
 - ✓ Check expiration date
 - ✓ Check fluid for clarity and presence
- ◄ Check to be sure the auto-injector is with you whenever the person leaves the house
- ◄ Check that when traveling the EAI is easily accessible (and not left in heat or sun)
- ◄ Complete documentation of the above checks
- ◄ Administer the EAI in case of an allergic reaction
- ◄ Complete an incident report and notify the appropriate people
- ◄ Staff must receive annual training on use of the EAI



Skills Checklist for Giving EpiPen® Brand epinephrine auto-injector – Read manufacturer’s instructions for all other brands

- _____ 1. Get the auto-injector from where it is kept.
- _____ 2. Put on gloves if available.
- _____ 3. Remove auto-injector from carrier tube by tipping tube to side and sliding auto-injector out.
- _____ 4. Hold auto-injector with orange end pointing down while you pull off the blue safety release with the other hand. (Blue to the sky, orange to the thigh). (#1 on picture)
- _____ 5. Place orange tip against the upper outer thigh at a right angle.
- _____ 6. Swing arm out then swing back toward upper outer thigh and push the orange tip of the auto-injector firmly into thigh until it “clicks.” (#2 on picture)
- _____ 7. The click means the injection has started. Continue to hold the EAI firmly against the thigh. Count S L O W L Y to 3. (“1-1000,” “2-1000,” “3-1000.”) The injection is now complete.
- _____ 8. Remove auto-injector from thigh. The orange tip will extend to cover the needle. If the needle is visible, DO NOT attempt to reuse it.
- _____ 9. Massage the injection area for 10 seconds.
- _____ 10. Note the time the injection was done.
- _____ 11. Call 911. (#3 on picture)
- _____ 12. Stay with the person and watch the time.
- _____ 13. Give a second auto-injection if symptoms have not gone away at 5 minutes after the first injection was done.



Trainee name: _____ Date: _____

_____ Instructor initials Instructor Name _____

Comments:

Individual Specific Training form for Epinephrine Auto-Injector

Individual's Name: _____

<p>Person's allergies: _____</p> <p>*Brand of epinephrine auto-injector _____</p> <p>Review of manufacturer's instructions for this brand of auto-injector.</p> <p>Person's known symptoms of allergic reactions</p> <p>_____</p> <p>_____</p> <p>Location of auto-injector at home: _____</p> <p>at work: _____</p> <p>other: _____</p> <p>Checks to be done every time staff or setting changes:</p> <table><tr><td><input checked="" type="checkbox"/> Expiration date</td><td><input checked="" type="checkbox"/> Where checks are to be documented</td></tr><tr><td><input checked="" type="checkbox"/> Color of fluid</td><td><input checked="" type="checkbox"/> EAI properly stored</td></tr></table> <p>Who to contact after epinephrine auto-injector has been administered: _____</p> <p>_____</p> <p>How to get a replacement for an expired or used epinephrine auto-injector or if the liquid in the window is pink, brown or cloudy or not visible:</p> <p>_____</p> <p>_____</p>	<input checked="" type="checkbox"/> Expiration date	<input checked="" type="checkbox"/> Where checks are to be documented	<input checked="" type="checkbox"/> Color of fluid	<input checked="" type="checkbox"/> EAI properly stored
<input checked="" type="checkbox"/> Expiration date	<input checked="" type="checkbox"/> Where checks are to be documented			
<input checked="" type="checkbox"/> Color of fluid	<input checked="" type="checkbox"/> EAI properly stored			

IST provided by _____ to _____ on _____

Epinephrine Auto-Injector: Checklist for Training

All content must be TAUGHT; do not give to students to just read

Content Covered	<div style="text-align: right; font-size: small;">✓</div> Discussed
1. Staff will receive annual training on use of the auto-injector	
2. Goals and objectives p. 1	
3. Terminology p. 3	
4. Why people have a prescription for an epinephrine auto-injector p. 4	
5. The signs of anaphylaxis p. 4	
6. Why an auto-injector would be used p. 4	
7. When an auto-injector would be used p. 4	
8. Important information to remember BEFORE using an EAI p. 5	
9. Steps to follow when giving an auto-injection p. 6	
10. Important information to remember WHEN using an auto-injector p. 7	
11. Important information to remember AFTER using an auto-injector p. 8	
12. Risks and side effects associated with auto-injector use p. 8	
13. Staff responsibility if person self-administers their own auto-injector p. 9	
14. Staff responsibility when staff administers an auto-injector to the individual p. 9	
15. Requirement for Individual Specific Training (IST) prior to use of an epinephrine auto-injector p. 5	
<p style="color: red; margin: 0;">This training on the use of an EAI does NOT qualify uncertified staff to administer medications. Staff MUST have the DODD Medication Administration Certification 1 before being allowed to administer medications.</p>	

Trainee name: _____ Date: _____

_____ Instructor initials Instructor Name _____

Comments: