

Allergic reactions range from mild (e.g. hay fever) to severe (e.g. anaphylaxis). Anaphylaxis (an-a-fi-LAK-sis) is a serious, life-threatening allergic reaction. The most common anaphylactic reactions are to foods, insect stings, or medications. Symptoms may develop immediately, rapidly progress over minutes, or develop slowly over hours. Anaphylaxis requires immediate medical treatment, including a prompt injection of epinephrine and a trip to a hospital emergency room. If it isn't treated properly, anaphylaxis can be fatal.¹

Signs and Symptoms of Anaphylaxis may include¹:

- Red rash, with hives / welts, that is usually itchy*
- Swollen throat or swollen areas of the body
- Wheezing
- Passing out
- Chest tightness
- Difficulty breathing, cough
- Hoarse voice
- Difficulty swallowing
- Vomiting
- Diarrhea
- Stomach cramping
- Pale or red color to the face and body
- Feeling of impending doom

**It is possible to have a severe allergic reaction without skin symptoms*

First Aid Response to Treat Anaphylaxis

1. Contact EMS by calling 911
2. If possible, separate the patient from the allergen
3. If in a remote area, evacuate to seek emergency medical care for the patient immediately.
4. If the patient can speak and swallow, give oral antihistamines (adult dose = 25mg -50mg of Diphenhydramine hydrochloride every 4-6 hours) and continue until EMS takes responsibility for care.
5. Inject epinephrine via auto-injector (adult dose = 0.3mg intramuscular into the upper thigh) for:
 - any airway swelling (lips, tongue, uvula, voice changes)
 - large areas of swelling
 - respiratory compromise or shock

6. If severe allergic reaction continues, after 15 minutes administer a second dose of epinephrine via auto-injector.

Directions for Use of Auto-injectors

1. Never put thumbs, fingers, or hands over the tip of the auto-injector.
2. Wear gloves.
3. Inform the patient of your actions and obtain consent from the patient before administering epinephrine. If unresponsive, implied consent is acceptable in a life-threatening situation.
4. Form a fist around the auto-injector.
5. With your other hand, remove the safety-caps.
6. Jab the auto-injector firmly into patient's outer thigh so that the auto-injector is perpendicular to the thigh.
7. Hold the auto-injector firmly in the thigh for 10 seconds to allow time for the medication to disperse.
8. Remove the auto-injector, and then massage the injection area for several seconds.
9. Store used auto-injectors in their carrying case, inserting them carefully and needle-first into the labeled side.
10. Continuously monitor the patient and immediately seek emergency medical care.
11. As needed, a second dose of epinephrine may be administered 15 minutes after the initial dose.

Additional Guidelines for Auto-injectors

- Become familiar with the auto-injector before the need to use it arises; know where it is physically located.
- Begin first aid response to treat anaphylaxis (instructions above) at the first sign of anaphylaxis.
- If a participant or co-worker has reported a known allergy and has a personal prescription for epinephrine, is experiencing signs/symptoms of anaphylaxis, and cannot self-administer epinephrine, trained staff with an Epinephrine Certificate Card may administer auto-injector(s) as described in this action plan.
- If a participant or coworker is experiencing signs/symptoms of anaphylaxis, and does not have a prescription for epinephrine, only trained staff with an Epinephrine Certificate Card may administer auto-injector(s) as described in this action plan.
- ANY administration of epinephrine, intentional or accidental, initiates an evacuation to emergency medical care.
- Protect auto-injectors from heat/light and do not refrigerate.
- Replace and do not use auto-injectors if solution is discolored, cloudy, or contains particles.
- There are different brands of epinephrine auto-injectors. Please refer to the manufacturers' instructions for brand-specific information and instructions for use.

Epinephrine Auto-Injector Operation Plan for (insert Site or Department Name)

The (insert director/supervisor job title) is the Epinephrine Emergency Action Plan Administrator (Plan Administrator) and is responsible for the implementation and ongoing oversight of this action plan, as well as applicable State laws and policies. This action plan complies directly with the requirements of Assembly Bill 1386.

A. (Insert campus or affiliate physician name and contact information) is the Medical Director responsible for writing Epinephrine-Auto-Injector Prescriptions for (insert Site or Department Name) after receiving verification of Epinephrine-Auto-Injector Certification and approving this action plan.

B. Trained department staff are responsible for properly storing auto-injectors in their first aid kits.

C. All department staff and researchers that have completed Epinephrine Auto-Injector Training are listed here (attach an additional page as necessary):

Name	Signature*	Phone	Certification Date	Certification Expiration Date

**By signing above, you acknowledge that you have read and understood the Epinephrine Emergency Action Plan and understand your role / responsibilities with respect to the plan.*

D. All trained staff/researchers are responsible for verifying expiration dates and condition of auto-injectors prior to departing on a trip to ensure they are appropriate for use.

E. The Plan Administrator is responsible for attached copies of all CPR/First and Epinephrine Auto-Injector Training certifications to this Plan.

F. The Plan Administrator is responsible for checking auto-injectors annually in (insert month) and replacing auto-injectors nearing expiration.

G. The Plan Administrator is responsible for reviewing and making any needed revisions to this emergency action plan annually. Any changes to this action plan require the approval of the Department's Plan Administrator, EH&S, and the prescribing physician.

H. Expired or used auto-injectors must be picked up by (insert campus contact/EH&S) who is responsible for disposing of them properly.

I. The Plan Administrator is responsible for submitting reports of epinephrine administration to the prescribing physician and EH&S to coordinate reporting to the California Emergency Medical Services Authority (within 30 days).

J. The Plan Administrator is responsible for the ongoing maintenance of the Program and Plan as follows.

Epinephrine Auto-Injector Plan Maintenance

Epinephrine auto-injector training certification	Recertification every 2 years
CPR / First Aid Certification	Recertification (as specified by organization, typically every 2 years)
Plan Review	Annually
Re-stock epinephrine auto-injectors	Prior to expiration date
Replace used epinephrine auto-injectors	As soon as possible, no later than 2 weeks after use

Plan Administrator's Name

Signature

Date

¹ American Academy of Allergy, Asthma, and Immunology. <http://www.aaaai.org/conditions-and-treatments/allergies/anaphylaxis>. 2017, December.