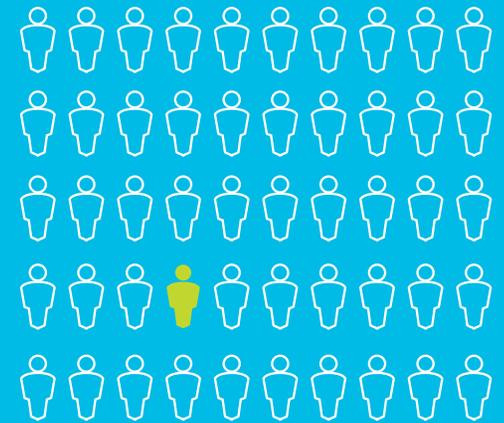


Nearly 1 in 50 Americans have experienced a life-threatening (severe) allergic reaction



Let's make sure  
you're prepared

**The review or approval of this document (or of the related materials) by any state agency or department is not indicative of the state's endorsement or recommendation of any particular product or company.**



# Welcome to the **Mylan On Location™** featuring EpiPen® (epinephrine injection) Auto-Injector Training Course

You have been chosen for the very important task of helping someone who is experiencing a life-threatening (severe) allergic reaction. This special training is meant to empower you to feel confident in your ability to administer the medication needed during this type of emergency.

Your employer has chosen to possess medication for emergency life-threatening allergic reactions. Training you to recognize the signs and symptoms and respond appropriately gives both you and your employer peace of mind in case a severe allergic reaction occurs at your establishment.

## **Indications**

EpiPen® (epinephrine injection) 0.3 mg and EpiPen Jr® (epinephrine injection) 0.15 mg 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**

EpiPen® and EpiPen Jr® Auto-Injectors contain a single dose of epinephrine, which you (or your caregiver or others who may be in a position to administer EpiPen® or EpiPen Jr®) inject into the middle of your outer thigh (upper leg) (through clothing, if necessary). Get emergency medical help right away.

**Please see Important Safety Information and full Prescribing Information and Patient Information at the end of this presentation.**



# Important Safety Information

## Important Safety Information

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Tell your doctor if you have certain medical conditions such as asthma, depression, thyroid disease, Parkinson's disease, diabetes, high blood pressure or heart disease, have any other medical conditions, are pregnant or plan to become pregnant, or are breastfeeding or plan to breastfeed. Be sure to also tell your doctor 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 have longer lasting side effects when you use EpiPen® or EpiPen Jr®.**

The most common side effects may include increase in heart rate, stronger or irregular heartbeat, sweating, nausea or vomiting, difficulty breathing, paleness, dizziness, weakness, shakiness, headache, apprehension, nervousness or anxiety. These side effects may go away if you rest. **Tell your healthcare professional if you have any side effect that bothers you or that does not go away.**

**Please see the full Prescribing Information and Patient Information.**

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit [www.fda.gov/medwatch](http://www.fda.gov/medwatch) or call 1-800-FDA-1088.

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



EpiPen®, EpiPen Jr®, EpiPen 2-Pak® and EpiPen Jr 2-Pak® are registered trademarks owned by the Mylan companies. Mylan On Location™ is a trademark of Mylan Inc. The Mylan logo is a registered trademark of Mylan Inc.

# Factors to consider

Some patients may be at greater risk for developing adverse reactions after epinephrine administration. Despite these concerns, there are no medical conditions that do not allow the use of EpiPen<sup>®</sup> in a life-threatening anaphylactic emergency.

Therefore, patients with these conditions, and/or any other person who might be in a position to administer EpiPen<sup>®</sup> or EpiPen Jr<sup>®</sup> to a patient experiencing anaphylaxis, should be carefully instructed in regard to the circumstances under which epinephrine should be used.

## **Important Safety Information (continued)**

The most common side effects may include increase in heart rate, stronger or irregular heartbeat, sweating, nausea or vomiting, difficulty breathing, paleness, dizziness, weakness, shakiness, headache, apprehension, nervousness or anxiety. These side effects may go away if you rest. **Tell your healthcare professional if you have any side effect that bothers you or that does not go away.**

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# Through this course, you'll:

- ✓ **Understand** what anaphylaxis is and its causes
- ✓ **Recognize** the signs and symptoms to be prepared for an emergency
- ✓ **Be able** to properly administer EpiPen<sup>®</sup> and EpiPen Jr<sup>®</sup> (epinephrine injection) Auto-Injectors

## **Important Safety Information**

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Life - threatening  
allergic reactions



## Section 2

# Anaphylaxis (an-a-fi-LAX-is):

A potentially life-threatening (severe) allergic reaction

- ① Unpredictable
- ② Signs and symptoms may vary from one event to the next
- ③ May occur quickly (within 5 minutes) or progress over hours
- ④ Can be life-threatening

# Anaphylaxis can happen anywhere



There has been an increase in the number of people at risk for severe allergic reactions

## Anaphylaxis frequently occurs outside the home:



Work



Restaurants



Outdoors



Traveling



School



Hospitals/Clinics



# The common triggers of anaphylaxis:

## Certain foods



Peanuts  
Tree nuts (walnuts, pecans, cashews)  
Shellfish (shrimp, lobster)  
Fish  
Milk  
Eggs  
Wheat  
Soy

## Insect stings & bites



Bees  
Wasps  
Fire ants

## Medication



*This may include:*  
Penicillin  
Aspirin  
Ibuprofen  
Cancer medication  
Allergen immunotherapy

## Latex



*Such as:*  
Gloves  
Condoms  
Balloons  
Infant pacifiers  
Bottle nipples  
Bandages  
Rubber sports equipment

## Exercise



Jogging  
Yard work  
Aerobics

# People who know they have severe allergies should be prepared

An anaphylaxis action plan includes:

- Avoid the common triggers of anaphylaxis (certain foods, insect stings and bites, medication, latex and exercise)
- Know the alternative names of food triggers or foods containing triggers
- When dining out check the menu on the restaurant's website or call ahead
- Talk to the wait staff or chef
- Consider carrying an allergy card
- Bring epinephrine auto-injectors everywhere you go

In case of a life-threatening allergic reaction:

- 1 Inject epinephrine into the middle of the outer thigh
- 2 Call 911/emergency responders
- 3 Have a list of emergency contacts with you

**But not everyone knows they have severe allergies.**

# Signs and symptoms of anaphylaxis

## 1 Mouth

- Itching
- Swelling of lips and/or tongue

## 2 Lungs

- Shortness of breath
- Coughing
- Wheezing

## 3 Skin

- Itching
- Hives
- Redness
- Swelling

## 4 Throat

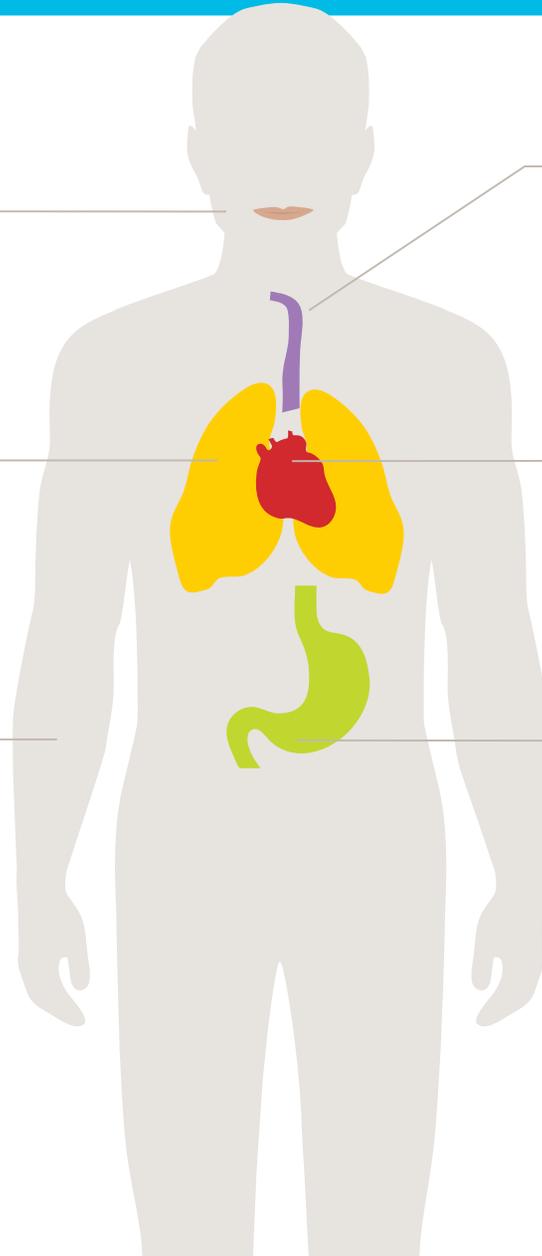
- Itching
- Tightness/closure
- Coughing

## 5 Heart

- Weak pulse
- Dizziness
- Passing out

## 6 Stomach

- Vomiting
- Nausea
- Diarrhea
- Cramps



# How to recognize anaphylaxis



Look for symptoms in 2 or more body systems. Here are examples of some of the body systems and symptoms you may see:

## **Skin and mucous membranes**

- Hives
- Swelling of lips, tongue or small fleshy lobe that hangs from the roof of the mouth

## **Respiratory**

- Shortness of breath, wheezing or coughing

## **Digestive system (stomach, intestines)**

- Cramps
- Vomiting



# Epinephrine

-  The ONLY primary medication for anaphylaxis
-  When administered into the outer thigh muscle, it takes approximately 5 minutes to work

# Epinephrine works on various body systems by:



**Relaxing** the airways to reduce breathing difficulties



**Preventing** and **relieving** low blood pressure and shock



**Increasing** the rate and force of cardiac contractions



**Reducing** skin irritation, such as hives and redness

# If epinephrine treatment is delayed:

- Symptoms may progress quickly
- Risk of life-threatening events is increased
- There's an increased risk of a second reaction within 1-72 hours

# Summary Review

## Section 2

### Anaphylaxis

- ✓ A potentially life-threatening allergic reaction
- ✓ Is unpredictable
- ✓ Signs and symptoms may vary from one event to the next
- ✓ May occur quickly (within 5 minutes)

### How to recognize anaphylaxis

- ✓ Look for symptoms in 2 or more body systems

### Common allergy triggers

- ✓ Certain foods
- ✓ Insect stings & bites
- ✓ Medication
- ✓ Latex
- ✓ Exercise

# Summary Review (continued)

## Section 2

### Signs and symptoms

- ✓ Swelling of lips and/or tongue
- ✓ Throat tightness
- ✓ Shortness of breath
- ✓ Weak pulse
- ✓ Dizziness
- ✓ Passing out
- ✓ Nausea/vomiting
- ✓ Itchiness near mouth

### Epinephrine

- ✓ The ONLY primary medication for anaphylaxis
- ✓ Give it at the first sign or symptom
- ✓ If not administered quickly, symptoms may progress quickly
- ✓ A second anaphylactic reaction can happen 1-72 hours after the first

How to be prepared  
for an emergency



## Section 3

# In case of anaphylaxis:

- R**ecognize signs and symptoms
- E**nable the auto-injector (remove from case and prepare for use)
- A**dminister epinephrine
- C**all 911/emergency responders – immediate medical help or care is essential because a second (or delayed) reaction could occur in 1-72 hours
- T**reat again after 5 minutes, if symptoms persist
  - More than two sequential doses of epinephrine should be administered only under direct medical supervision

# Signs and symptoms of anaphylaxis

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- Swelling of lips and/or tongue

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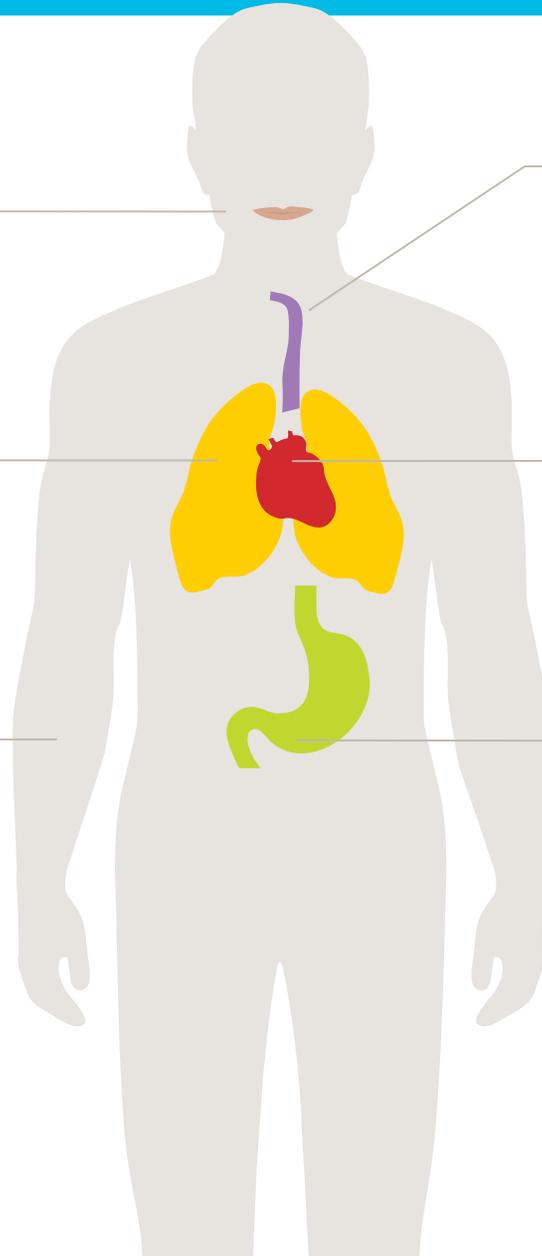
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# Anaphylaxis can progress quickly



Give epinephrine at the first sign of symptoms

# In case of anaphylaxis:

**R**ecognize signs and symptoms

**E**nable the auto-injector (remove from case and prepare for use)

**A**dminister epinephrine

**C**all 911/emergency responders – immediate medical help or care is essential because a second (or delayed) reaction could occur in 1-72 hours

**T**reat again after 5 minutes, if symptoms persist

- More than two sequential doses of epinephrine should be administered only under direct medical supervision

# Call 911 or designate someone to call



A second reaction could occur without additional exposure to the allergen



## **Have the affected person:**

- Lie on his or her back, and elevate their legs
- OR-
- Assume a comfortable position, if vomiting or having trouble breathing



## **Stay with the person** and monitor symptoms until help arrives

- Persistent symptoms may require a second dose of epinephrine



# In case of anaphylaxis:

- R**ecognize signs and symptoms
- E**nable the auto-injector (remove from case and prepare for use)
- A**dminister epinephrine
- C**all 911/emergency responders – immediate medical help or care is essential because a second (or delayed) reaction could occur in 1-72 hours
- T**reat again after 5 minutes, if symptoms persist
  - More than two sequential doses of epinephrine should be administered only under direct medical supervision

# In case of anaphylaxis:

- Monitor symptoms and provide info to first responder
  - If there is no improvement in 5 minutes or symptoms worsen, give a second dose of epinephrine
- More than two sequential doses of epinephrine should be administered only under direct medical supervision
  - Provide used and unused epinephrine auto-injectors to first responders

# EpiPen<sup>®</sup> (epinephrine injection) Auto-Injectors



**The #1 prescribed epinephrine auto-injector for 25+ years\***



EpiPen<sup>®</sup> Auto-Injectors come in 2 strengths:



**EpiPen Jr 2-Pak<sup>®</sup>** (epinephrine injection) 0.15 mg Auto-Injectors  
For children 33 lbs - 66 lbs

**EpiPen 2-Pak<sup>®</sup>** (epinephrine injection) 0.3 mg Auto-Injectors  
For those weighing 66 lbs or more

\*Based on IMS data from 1987–April 2015.

## Important Safety Information

EpiPen<sup>®</sup> (epinephrine injection) 0.3 mg and EpiPen Jr<sup>®</sup> (epinephrine injection) 0.15 mg Auto-Injectors contain a single dose of epinephrine, which you (or your caregiver or others who may be in a position to administer EpiPen<sup>®</sup> or EpiPen Jr<sup>®</sup>) inject into the middle of your outer thigh (upper leg) (through clothing, if necessary).

**Please see Important Safety Information and full Prescribing Information and Patient Information at the end of this presentation.**



**Section 3:** How to Be Prepared for an Emergency

# How to administer EpiPen<sup>®</sup> (epinephrine injection) Auto-Injectors



# 3 simple steps:

## How to use the EpiPen<sup>®</sup> (epinephrine injection) Auto-Injector

1

### PREPARE

- **Remove the EpiPen<sup>®</sup> or EpiPen Jr<sup>®</sup> from the clear carrier tube**
- Flip open the yellow cap of your EpiPen<sup>®</sup> or the green cap of your EpiPen Jr<sup>®</sup> carrier tube
- Tip and slide the auto-injector out of the carrier tube
- **Grasp the auto-injector in your fist with the orange tip pointing downward**
- With your other hand, **remove the blue safety release by pulling straight up** without bending or twisting it



#### 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

#### Important Safety Information (continued)

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.

**Please see Important Safety Information and full Prescribing Information and Patient Information at the end of this presentation.**

# 3 simple steps:

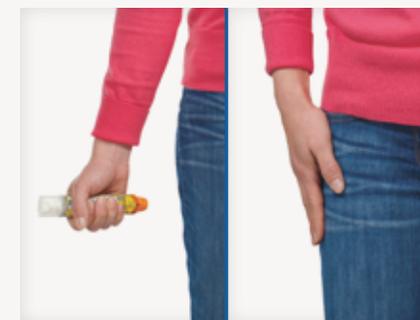
## How to use the EpiPen® (epinephrine injection) Auto-Injector

2

### ADMINISTER

Administer the EpiPen® or EpiPen Jr® Auto-Injector

- Blue to the sky, orange to the thigh
- Hold the auto-injector with the orange tip near the middle of the outer thigh (upper leg)
- **Swing and firmly push the orange tip against the outer thigh until it “clicks”**
- **Keep the auto-injector firmly pushed against the thigh at a 90° angle (perpendicular) to the thigh**
- **Hold firmly against the thigh for approximately 10 seconds to deliver the medicine. The injection is now complete**
- **Remove the auto-injector from the thigh. The orange tip will extend to cover the needle**
- **Massage the injection area for 10 seconds**



#### Important Safety Information (continued)

DO NOT INJECT INTO YOUR VEINS, BUTTOCKS, FINGERS, TOES, HANDS OR FEET. In case of accidental injection, please seek immediate medical treatment.

Please see Important Safety Information and full Prescribing Information and Patient Information at the end of this presentation.

# 3 simple steps:

## How to use the EpiPen® (epinephrine injection) Auto-Injector

3

### GET EMERGENCY MEDICAL HELP NOW

Further medical attention may be needed. A second EpiPen® or EpiPen Jr® Auto-Injector may be needed if symptoms continue or recur.

The affected person should:

- Take the used auto-injector with them when he or she goes to see a healthcare professional
- Tell the healthcare professional he or she received an injection of epinephrine. Show the healthcare professional where he or she received the injection
- Give the used EpiPen® or EpiPen Jr® Auto-Injector to the healthcare professional for inspection and proper disposal

#### **Important Safety Information (continued)**

Epinephrine should be used with caution if you have heart disease or are taking certain medicines that can cause heart-related (cardiac) symptoms.

**Please see Important Safety Information and full Prescribing Information and Patient Information at the end of this presentation.**

# Important information for administration

- ✓ The EpiPen® Auto-Injector has a yellow-colored label
- ✓ The EpiPen Jr® Auto-Injector has a green-colored label
- ✓ The EpiPen® Trainer has a grey color, and contains no medicine and no needle
- ✓ The auto-injector is designed to work through clothing
- ✓ The blue safety release on the EpiPen® and EpiPen Jr® Auto-Injectors helps to prevent accidental injection of the device. Keep the blue safety release on until you need to use it
- ✓ Only inject into outer thigh. Never inject into any other part of the body
- ✓ Never put your thumb, fingers or hand over the orange tip. The needle comes out of the orange tip
- ✓ If an accidental injection happens, get medical help right away
- ✓ Do not place patient information or any other foreign objects in carrier with the Auto-Injector, as this may prevent you from removing the Auto-Injector for use

## Important Safety Information (continued)

Tell your doctor if you have certain medical conditions such as asthma, depression, thyroid disease, Parkinson's disease, diabetes, high blood pressure or heart disease, have any other medical conditions, are pregnant or plan to become pregnant, or are breastfeeding or plan to breastfeed.

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# How to store EpiPen®

- Epinephrine is light-sensitive and should be stored in the carrier tube provided
- Store at 20° to 25°C (68° to 77°F)
- Do not refrigerate
- Protect from light
- Before using, check to make sure the solution in the auto-injector is not discolored
- Carrier tube is not waterproof

## **Important Safety Information (continued)**

Be sure to also tell your doctor 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 have longer lasting side effects when you use EpiPen® or EpiPen Jr®.**

**Please see Important Safety Information and full Prescribing Information and Patient Information at the end of this presentation.**

### In case of anaphylaxis, it's important to:

- ✓ Recognize signs and symptoms
- ✓ Enable the auto-injector (remove from case and prepare for use)
- ✓ Administer epinephrine
- ✓ Call 911/emergency responders – immediate medical help or care is essential because a second (or delayed) reaction could occur in 1-72 hours
- ✓ Treat again after 5 minutes, if symptoms persist
  - More than two sequential doses of epinephrine should be administered only under direct medical supervision

### Using an EpiPen® Auto-Injector

- ✓ Prepare
- ✓ Administer
- ✓ Get emergency medical help

### Storing an EpiPen® Auto-Injector

- ✓ Store EpiPen® Auto-Injectors in the carrier tube provided
- ✓ Check to make sure the solution in the auto-injector is not discolored

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



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# References

American Academy of Allergy, Asthma & Immunology. Anaphylaxis. <http://www.aaaai.org/conditions-and-treatments/allergies/anaphylaxis.aspx>. Accessed May 13, 2015.

American Heart Association. Low blood pressure.

[http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/AboutHighBloodPressure/Low-Blood-Pressure\\_UCM\\_301785\\_Article.jsp](http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/AboutHighBloodPressure/Low-Blood-Pressure_UCM_301785_Article.jsp). Accessed July 1, 2015.

Boyce JA, Assa'ad A, Burks AW, et al. Guidelines for the diagnosis and management of food allergy in the United States: report of the NIAID-sponsored expert panel. *J Allergy Clin Immunol*. 2010;126(suppl 6):S1-S58.

Canonica GW, Cox L, Pawankar R, et al. Sublingual immunotherapy: World Allergy Organization position paper 2013 update. *World Allergy Organ J*. 2014;7(1):6.

Cianferoni A, Muraro A. Food-induced anaphylaxis. *Immunol Allergy Clin North Am*. 2012;32(1):165-195.

Clark S, Espinola J, Rudders SA, Banerji A, Camargo CA Jr. Frequency of US emergency department visits for food-related acute allergic reactions. *J Allergy Clin Immunol*. 2011;127(3):682-683.

Cox L, Nelson H, Lockey R, et al. Allergen immunotherapy: a practice parameter third update. *J Allergy Clin Immunol*. 2011;127(suppl 1):S1-S55.

Creticos PS. Sublingual immunotherapy for allergic rhinitis. *UpToDate*. 2014.

Data on file, Mylan Inc. IMS data (1987-April 2015).

EpiPen [prescribing information and patient prescribing information]. Morgantown, WV: Mylan Specialty LP; 2014.

Food Allergy Research & Education (FARE). <http://www.foodallergy.org>. Accessed June 2, 2015.

Golden DB, Moffitt J, Nicklas RA. Stinging insect hypersensitivity: a practice parameter update 2011. *J Allergy Clin Immunol*. 2011;127(4):852-854.e1-e23.

Hosey RG, Carek PJ, Goo A. Exercise-induced anaphylaxis and urticaria. *Am Fam Physician*. 2001;64(8):1367-1372.

Kim JS, Sicherer SH. Living with food allergy: allergen avoidance. *Pediatr Clin North Am*. 2011;58(2):459-470.

## References (continued)

Lieberman PL. Recognition and first-line treatment of anaphylaxis. *Am J Med.* 2014;127(suppl 1): S6-S11.

Lieberman P, Nicklas RA, Oppenheimer J, et al. The diagnosis and management of anaphylaxis practice parameter: 2010 update. *J Allergy Clin Immunol.* 2010;126(3):477-480.e1-e42.

Mayo Foundation for Medical Education and Research. Diseases and conditions. Shellfish allergy. <http://www.mayoclinic.org/diseases-conditions/shellfish-allergy/basics/definition/con-20032093>. Accessed May 15, 2015.

Merriam-Webster. Epinephrine. <http://www.merriam-webster.com/dictionary/epinephrine>. Accessed July 28, 2015.

Muñoz-Furlong A, Sampson HA. The management of food allergy. In: Metcalfe DD, Sampson HA, Simon RA, eds. *Food Allergy: Adverse Reactions to Foods and Food Additives*. 4th ed. Malden, MA: Blackwell Publishing; 2008:436-460.

Pawankar R, Canonica GW, Holgate ST, Lockey RF. *World Allergy Organization White Book on Allergy 2011-2012: Executive Summary*. Milwaukee, WI: World Allergy Organization; 2011.

Sampson HA, Muñoz-Furlong A, Campbell RL, et al. Second symposium on the definition and management of anaphylaxis: summary report—second National Institute of Allergy and Infectious Disease/Food Allergy and Anaphylaxis Network symposium. *Am Emerg Med.* 2006;47(4):373-380.

Simons FER. Anaphylaxis: recent advances in assessment and treatment. *J Allergy Clin Immunol.* 2009;124(4):625-636.

Simons FER. Anaphylaxis. *J Allergy Clin Immunol.* 2010;125(2 suppl 2):S161-S181.

Simons FER, Arduso LR, Bilò MB, et al. International consensus on (ICON) anaphylaxis. *World Allergy Organ J.* 2014;7(1):9.

Simons FER, Arduso LR, Bilò MB, et al. World Allergy Organization guidelines for the assessment and management of anaphylaxis. *World Allergy Organ J.* 2011;4(2):13-37.

Wood RA, Camargo CA Jr, Lieberman P, et al. Anaphylaxis in America: the prevalence and characteristics of anaphylaxis in the United States. *J Allergy Clin Immunol.* 2014;133(2):461-467.

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