

Agenda for Epi Pen Administration Training

- A. Overview of Training
- B. Food Allergy
- C. Insect Allergy
- D. Other Allergies
- E. Anaphylaxis
 Signs and Symptoms
- F. Treatment
- G. Health Care Plan
- H. School Policy and Procedure
- I. Documentation

Overview of Allergies and Anaphylaxis

Anaphylaxis

Some allergies such as food, medication, insect stings, and latex can trigger a severe, systemic allergic reaction called anaphylaxis. Anaphylaxis is a life-threatening allergic reaction that may involve systems of the entire body. Anaphylaxis is a medical emergency requiring immediate medical treatment and follow-up care by an allergist/immunologist. Deaths have occurred in schools because of delays in recognizing and responding to symptoms with immediate treatment and further medical interventions.

Food Allergy

Food allergy is a growing concern in the United States and creates a significant challenge for children in school. Increasing numbers of children are diagnosed with life-threatening food allergies (6 to 8 percent) that may result in a potentially life-threatening condition (anaphylaxis). Currently, there is no cure for life-threatening food allergies. The only way to prevent life-threatening food allergies from occurring is strict avoidance of the identified food allergen. Critical to saving lives are plans that include life-threatening food allergy education and awareness, avoidance of allergens, and immediate treatment of anaphylaxis.

The top eight most common food allergens are: milk, eggs, peanuts, tree nuts (such as pecans and walnuts), shellfish, fish, wheat, and soy, although an individual can have an allergy to any food. The most prevalent food allergens for children are milk, eggs, and peanuts; while for adults the most prevalent allergens are shellfish and peanuts. Children will frequently outgrow an allergy to eggs, milk, and soy. However allergies to peanuts, tree nuts, fish, and shellfish usually continue into adulthood. Not eating the foods the child is sensitive to is the only proven therapy at this time.

Insect Allergy

Insect allergy is an underreported event that occurs every year to many adults and children. Approximately three percent of adults and one to two percent of children may be at risk for anaphylaxis from insect stings. Stinging insects commonly include bees, hornets, yellow jackets, paper wasps, and fire ants. For most, complications include pain and redness at the bite site. However, some people have a true allergy to insect stings that can lead to life-threatening systemic reactions (anaphylaxis). In these cases, prompt management of the reaction is needed. Immunotherapy (allergy shots) is available for some types of stinging insects. Allergy shots reduce the risk of severe reactions.

Latex Allergy

Latex products such as balloons, gloves, and gym equipment are a common cause of allergic-type reactions. Two common types of reactions include contact dermatitis and immediate allergic reactions. Contact dermatitis, a type of localized allergic reaction to the skin, can occur on any part of the body that has contact with latex products, usually after 12-36 hours. Immediate allergic reactions however, are potentially the most serious for of allergic reactions to latex products. Exposure can lead to anaphylaxis depending on the amount of allergen exposure and the degree of sensitivity. Students with latex allergies may also need to avoid certain foods including many fruits such as bananas, kiwi, avocado, and papaya. Latex should be avoided by students and staff at risk for anaphylaxis. Since the reactions caused by latex vary, each student at risk should be evaluated by the student's healthcare provider.

Symptoms of Anaphylaxis

In some individuals, symptoms may appear in only one body system such as the skin or lungs, while in others, symptoms appear in several body systems. The symptoms range from mild to life-threatening and may quickly become life-threatening depending upon the sensitivity of the individual and the amount of allergen exposure. Prior reactions are the best predictor of the severity of future reactions, but no one can predict with certainty how a reaction will occur or progress.

Life-threatening anaphylaxis symptoms usually happen within the first 20 minutes of exposure. Sometimes, however, the symptoms subside, then return hours later. In some cases, serious reactions might take hours to become evident. Food is the leading cause of anaphylaxis in children. Children who have asthma and food allergies are at a greater risk for anaphylaxis and may often react more quickly requiring aggressive and prompt treatment.

Signs and symptoms of harmful reactions may include any or several of the following and may require immediate emergency treatment:

Skin

- Hives, skin rashes, or flushing
- Itching/tingling/swelling of the lips, mouth, tongue, throat
- Nasal congestion or itchiness, runny nose, sneezing
- Itchy, teary, puffy eyes

Respiratory

- Chest tightness, shortness of breath, wheezing or whistling sound
- Hoarseness or choking

Gastro-Intestinal

- Nausea, vomiting, dry heaves
- Abdominal cramps or diarrhea

Cardiovascular

- Dizziness, fainting, loss of consciousness
- Flushed or pale skin
- Cyanosis (bluish circle around lips and mouth)

Mental/Psychological

- Changes in the level of awareness
- A sense of impending doom, crying, anxiety
- Denial of symptoms or severity

More subtle symptoms of a severe reaction may include:

- Screaming or crying
- Very young children will put their hands in their mouth or pull at their tongues

Treatment

Anaphylaxis is a potentially life-threatening condition, requiring immediate medical attention. Most fatalities occur due to delay in delivery of the needed medication. Although many medications may be used for treating anaphylaxis, epinephrine is the life-saving medication that must be given immediately to avoid death.

APPENDIX

HOW TO READ FOOD LABELS

HOW TO READ A LABEL for a MILK-FREE DIET Avoid foods that contain milk or any of these ingredients:	
artificial butter flavor butter, butter fat, butter oil buttermilk casein (<i>casein hydrolysate</i>) caseinates (<i>in all forms</i>) cheese cream cottage cheese curds custard ghee half & half lactalbumin, lactalbumin phosphate lactoferrin lactulose	milk (<i>in all forms including condensed, derivative, dry, evaporated, goat's milk and milk from other animals, lowfat, malted, milk fat, non-fat, powder, protein, skimmed, solids, whole</i>) nisin nougat pudding rennet casein sour cream, sour cream solids sour milk solids whey (<i>in all forms</i>) yogurt
May indicate the presence of milk protein:	
caramel candies chocolate flavorings (<i>including natural and artificial</i>) high-protein flour lactic acid starter culture lactose luncheon meat, hot dogs, sausages margarine non-dairy products	
HOW TO READ A LABEL for an EGG-FREE DIET Avoid foods that contain eggs or any of these ingredients:	
albumin (<i>also spelled as albumen</i>) egg (<i>dried, powdered, solids, white, yolk</i>) eggnog lysozyme mayonnaise meringue (<i>meringue powder</i>) surimi	
May indicate the presence of egg protein:	
flavoring (<i>including natural and artificial</i>) lecithin macaroni marzipan marshmallows nougat pasta	

HOW TO READ A LABEL for a WHEAT-FREE DIET

Avoid foods that contain wheat or any of these ingredients:

bran	gluten
bread crumbs	kamut
bulgur	matzoh, matzoh meal (<i>also spelled as matzo</i>)
couscous	pasta
cracker meal	seitán
durum	semolina
farina	spelt
flour (<i>all purpose, bread, durum, cake, enriched, graham, high gluten, high protein, instant, pastry, self-rising, soft wheat, steel ground, stone ground, whole wheat</i>)	vital gluten
	wheat (<i>bran, germ, gluten, malt, sprouts</i>)
	wheat grass
	whole-wheat berries

May indicate the presence of wheat protein:

flavoring (*including natural and artificial*)
 hydrolyzed protein
 soy sauce
 starch (*gelatinized starch, modified starch, modified food starch, vegetable starch, wheat starch*)
 surimi

HOW TO READ A LABEL for a PEANUT-FREE DIET

Avoid foods that contain peanuts or any of these ingredients:

artificial nuts	monkey nuts
beer nuts	nutmeat
cold pressed, expelled, extruded peanut oil	nut pieces
goobers	peanut
ground nuts	peanut butter
mixed nuts	peanut flour

May indicate the presence of peanut protein:

African, Asian (<i>especially Chinese, Indian, Indonesian, Thai, and Vietnamese</i>), and Mexican dishes	Mandelonas are peanuts soaked in almond flavoring.
baked goods (<i>pastries, cookies, etc.</i>)	Studies show that most allergic individuals can safely eat peanut oil (<i>not</i> cold pressed, expelled, or extruded peanut oil).
candy (<i>including chocolate candy</i>)	Arachis oil is peanut oil.
chili	Experts advise patients allergic to peanuts to avoid tree nuts as well.
egg rolls	A study showed that unlike other legumes, there is a strong possibility of cross-reaction between peanuts and lupine.
enchilada sauce	Sunflower seeds are often produced on equipment shared with peanuts.
flavoring (<i>including natural and artificial</i>)	
marzipan	
mole sauce	
nougat	

HOW TO READ A LABEL for a TREE-NUT-FREE DIET

Avoid foods that contain nuts or any of these ingredients:

almonds	natural nut extract (<i>i.e., almond, walnut</i>)
artificial nuts	nougat
Brazil nuts	nut butters (<i>i.e., cashew butter</i>)
caponata	nut meal
cashews	nutmeat
chestnuts	nut oil
filbert/hazelnuts	nut paste (<i>i.e., almond paste</i>)
gianduja (<i>a nut mixture found in some chocolate</i>)	pecans (<i>Mashuga Nuts®</i>)
hickory nuts	pesto
macadamia nuts	pine nuts (<i>also referred to as Indian, piñon,</i>
marzipan/almond paste	pistachios
nan-gai nuts	pralines
	walnuts
Mandelonas are peanuts soaked in almond flavoring.	
Mortadella may contain pistachios.	
Natural and artificial flavoring may contain tree nuts.	
Experts advise patients allergic to tree nut butters (<i>i.e., cashew butter</i>) to avoid peanuts as well.	
Talk to your doctor if you find other nuts not listed here.	

HOW TO READ A LABEL for a SOY-FREE DIET

Avoid foods that contain soy or any of these ingredients:

hydrolyzed soy protein	soy protein (<i>concentrate, isolate</i>)
natto	soy sauce
soy (<i>soy albumin, soy fiber, soy flour, soy grits, soy milk, soy nuts, soy sprouts</i>)	Tamari
soya	Tempeh
soybean (<i>curd, granules</i>)	textured vegetable protein (TVP)
	tofu
May indicate the presence of soy protein:	
Asian cuisine	Studies show most individuals allergic to soy may safely eat soy lecithin and soybean oil.
flavoring (<i>including natural and artificial</i>)	
vegetable broth	
vegetable gum	
vegetable starch	

HOW TO READ A LABEL for a SHELLFISH-FREE DIET

Avoid foods that contain shellfish or any of these ingredients:

abalone	mussels
clams (<i>cherrystone, littleneck, pismo, quahog</i>)	octopus
cockle (<i>periwinkle, sea urchin</i>)	oysters
crab	prawns
crawfish (<i>crayfish, ecrevisse</i>)	scallops
lobster (<i>langouste, langoustine, scampo, coral, tomalley</i>)	shrimp (<i>crevette</i>)
mollusks	snails (<i>escargot</i>)
	squid (<i>calamari</i>)

May indicate the presence of shellfish protein:

bouillabaisse
cuttlefish ink
fish stock
flavoring (*including natural and artificial*)
seafood flavoring (*such as crab or clam extract*)
surimi

Keep the following in mind:

Any food served in a seafood restaurant may be cross-contaminated with fish or shellfish.

For some individuals, a reaction may occur from cooking odors or from handling fish or shellfish.

Always carry medications and use them as soon as symptoms develop.

Nutrition Facts

Serving Size 3 oz. (85g)

Amount Per Serving	As Served
Calories 38	Calories from Fat 0

	% Daily Value
Total Fat 0g	0%
Saturated Fat 0g	0%
Cholesterol 0g	0%
Sodium 0g	2%
Total Carbohydrate 0g	3%
Dietary Fiber 0g	8%
Sugars 0g	

Protein 0g

Vitamin A 270%	✕	Vitamin C 10%
Calcium 2%	✕	Iron 0%

Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

		Calories	2,000	2,500
Total Fat	Less than	65g	80g	
Sat Fat	Less than	20g	80g	
Cholesterol	Less than	300mg	300mg	
Sodium	Less than	2,400mg	2,400mg	
Total Carbohydrate		300g	375g	
Dietary Fiber		25g	30g	

Any SEVERE SYMPTOMS after suspected or known ingestion:

One or more of the following:

- LUNG: Short of breath, wheeze, repetitive cough
 HEART: Pale, blue, faint, weak pulse, dizzy, confused
 THROAT: Tight, hoarse, trouble breathing/swallowing
 MOUTH: Obstructive swelling (tongue and/or lips)
 SKIN: Many hives over body

Or **combination** of symptoms from different body areas:

- SKIN: Hives, itchy rashes, swelling (e.g., eyes, lips)
 GUT: Vomiting, crampy pain

MILD SYMPTOMS ONLY:

- MOUTH: Itchy mouth
 SKIN: A few hives around mouth/face, mild itch
 GUT: Mild nausea/discomfort

1. INJECT EPINEPHRINE IMMEDIATELY

2. Call 911
3. Begin monitoring (see box below)
4. Give additional medications:*
 -Antihistamine
 -Inhaler (bronchodilator) if asthma

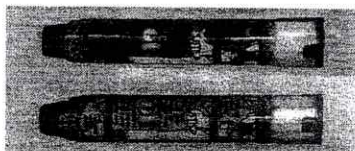
*Antihistamines & inhalers/bronchodilators are not to be depended upon to treat a severe reaction (anaphylaxis). USE EPINEPHRINE.

1. GIVE ANTIHISTAMINE

2. Stay with student; alert healthcare professionals and parent
3. If symptoms progress (see above), USE EPINEPHRINE
4. Begin monitoring (see box below)

DIRECTIONS FOR USE

- REMOVE AUTO-INJECTOR FROM CARRIER TUBE BEFORE USE.
- NEVER PUT THUMB, FINGERS OR HAND OVER ORANGE TIP.
- NEVER PRESS OR PUSH ORANGE TIP WITH THUMB, FINGERS OR HAND.
- THE NEEDLE COMES OUT OF ORANGE TIP.
- DO NOT REMOVE BLUE SAFETY RELEASE UNTIL READY TO USE.
- DO NOT USE IF SOLUTION IS DISCOLORED.
- DO NOT PLACE PATIENT INSERT OR ANY OTHER FOREIGN OBJECTS IN CARRIER WITH AUTO-INJECTOR, AS THIS MAY PREVENT YOU FROM REMOVING THE AUTO-INJECTOR FOR USE.

**TO REMOVE AUTO-INJECTOR FROM THE CARRIER TUBE:**

1. Flip open the yellow cap of the EpiPen® or the green cap of the EpiPen® Jr Auto-Injector carrier tube.



2. Remove the EpiPen® or EpiPen® Jr Auto-Injector by tipping and sliding it out of the carrier tube.

TO USE AUTO-INJECTOR:

1. Grasp unit with the orange tip pointing downward.
2. Form fist around the unit (orange tip down).
3. With your other hand, pull off the blue safety release.



4. Hold orange tip near outer thigh.

DO NOT INJECT INTO BUTTOCK.

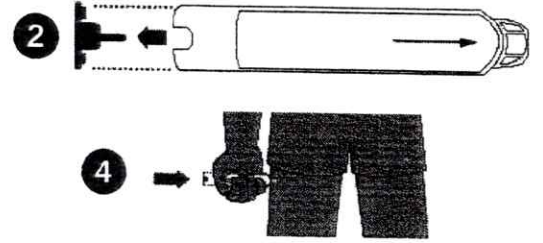
5. Swing and **firmly push** against outer thigh until it clicks so that unit is perpendicular (at 90° angle) to the thigh.
6. Hold **firmly against thigh** for approximately 10 seconds to deliver drug. (The injection is now complete. The window on auto-injector will be obscured.)

(Auto-injector is designed to work through clothing.)

7. Remove unit from thigh (the orange needle cover will extend to cover needle) and massage injection area for 10 seconds.
8. Call 911 and seek immediate medical attention.
9. Take the used auto-injector with you to the hospital emergency room.

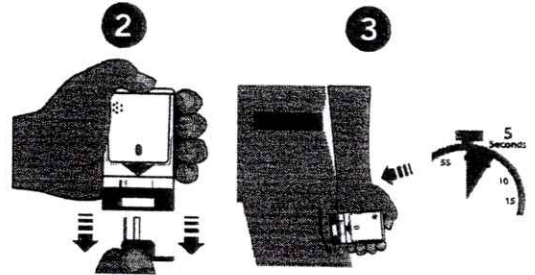
EPIPEN® (EPINEPHRINE) AUTO-INJECTOR DIRECTIONS

1. Remove the EpiPen Auto-Injector from the plastic carrying case.
2. Pull off the blue safety release cap.
3. Swing and firmly push orange tip against mid-outer thigh.
4. Hold for approximately 10 seconds.
5. Remove and massage the area for 10 seconds.



AUVI-Q™ (EPINEPHRINE INJECTION, USP) DIRECTIONS

1. Remove the outer case of Auvi-Q. This will automatically activate the voice instructions.
2. Pull off red safety guard.
3. Place black end against mid-outer thigh.
4. Press firmly and hold for 5 seconds.
5. Remove from thigh.



ADRENACLICK®/ADRENACLICK® GENERIC DIRECTIONS

1. Remove the outer case.
2. Remove grey caps labeled "1" and "2".
3. Place red rounded tip against mid-outer thigh.
4. Press down hard until needle penetrates.
5. Hold for 10 seconds. Remove from thigh.



OTHER DIRECTIONS/INFORMATION (may self-carry epinephrine, may self-administer epinephrine, etc.):

Treat student before calling Emergency Contacts. The first signs of a reaction can be mild, but symptoms can get worse quickly.

EMERGENCY CONTACTS — CALL 911

RESCUE SQUAD: _____
 DOCTOR: _____ PHONE: _____
 PARENT/GUARDIAN: _____ PHONE: _____

OTHER EMERGENCY CONTACTS

NAME/RELATIONSHIP: _____
 PHONE: _____
 NAME/RELATIONSHIP: _____
 PHONE: _____

PARENT/GUARDIAN AUTHORIZATION SIGNATURE _____

DATE _____

Poplar Bluff R - 1 Schools
Nursing Department
Standing Order for use of Epi-Pen

In the event of anaphylaxis of a pupil or adult, an Epi-Pen will be administered by the school nurse or trained personnel according to procedure. Training will be provided to unlicensed personnel by a Registered Nurse.

Definition: Anaphylaxis is a severe allergic reaction which can be life threatening. It may occur within minutes after a triggering event or up to an hour or more later.

MILD SYMPTOMS ONLY:

MOUTH: itchy mouth
SKIN: a few hives around mouth/face, mild itch
GUT: mild nausea/discomfort



1. **GIVE ANTIHISTAMINE**
2. Stay with student; alert healthcare professionals and parent.
3. If symptoms progress (see above), USE EPINEPHRINE
4. Begin monitoring (see box below)

Any SEVERE SYMPTOMS after suspected or known ingestion:

One or more of the following:
LUNG: short of breath, wheeze, repetitive cough
HEART: pale, blue, faint, weak pulse, dizzy, confused
THROAT: tight, hoarse, trouble breathing/swallowing
MOUTH: obstructive swelling (tongue and/or lips)
SKIN: many hives over body



1. **INJECT EPINEPHRINE IMMEDIATELY**
2. Call 911
3. Begin monitoring (see box below)
4. Give additional medications:*
-Antihistamine
-Inhaler (bronchodilator) if asthma

*Antihistamines & inhalers/bronchodilators are not to be depended upon to treat a severe reactions (anaphylaxis). USE EPINEPHRINE.

Medications/Doses

Antihistamine: Follow label instructions for weight and age, make sure person is not allergic to medication.
Epinephrine:

1. Immediate assessment of respiratory condition.
2. Call 911.
3. Call school nurse if available.
4. Select Epi-Pen or Epi-Pen Junior based on weight of patient.
*Epi-Pen Junior for patient 65 lbs or less,
Regular Epi-Pen for greater than 65 lbs.*

5. Inject Epi-Pen: Pull of gray cap.
Swing and jab firmly into upper, outer bare thigh, or through clothing if necessary.
Hold in place for 10 seconds.
Remove and massage area.

6. Document time given.
7. Monitor patient closely until arrival of ambulance.
8. Start CPR if needed.
9. Contact parents and Health Coordinator.

Monitoring: Stay with student and monitor breathing. Document any medication given orally or injected. Give full report to ambulance crew or parents.

Physicians signature

date

Poplar Bluff R-1 Schools

Benadryl and Epi Pen Administration Report

C65

This form needs to be completed if an Epi Pen or Benadryl is given to a student or staff member and returned to the Health Coordinator's office within 2 days of administration. A phone call should be made immediately.

Name: _____ Date: _____

School: _____ Time: _____

Please answer the following questions:

	Yes	no
Diagnosis or history of asthma	()	()
Diagnosis or history of an allergy	()	()
Did person have his or her own pen	()	()
Did person have his or her own Benadryl order	()	()
Was parent notified	()	()
Was 911 called	()	()
Was Health coordinator called	()	()

Location of person when symptoms developed: _____

Was there a trigger that precipitated this reaction: _____

Symptoms: _____

Epi Pen or Benadryl administered by: _____

Locations of patient when Epi Pen was administered: _____

DISPOSITION:

Transferred to ER: Yes () No () Discharged after _____ hours.

Hospitalized: Yes () No () Discharged after _____ days.

OUTCOME: _____

Form Completed by: _____ Date: _____

Delegating Epi Pen Administration

School Year _____

Mild signs and symptoms of an allergic reaction are itchy mouth, a few hives, mild nausea and/or discomfort. If a student presents with these symptoms, check their record for allergies to make sure they are not allergic to Benedryl, check with parent if possible. Benedryl may be given per label instructions for weight and age. If possible, contact a Registered nurse in the district prior to giving medication.

Steps	Initial Training	Return Demo	Update		
Stay with student and check for Benedryl allergies per parent or record.					
Give Antihistamine (Benedryl) per label instructions for age and weight					
If symptoms progress, Give Epi Pen – see instructions below.					

If symptoms progress, proceed to next steps. Severe Symptoms could include: shortness of breath, wheezing, cough, pale, blue, weak pulse, dizzy, difficulty swallowing, swelling of tongue/lips, hives, vomiting, itchy rashes, etc...

Steps	Initial Training	Return Demo	Update		
Review signs and symptoms of life threatening allergic reaction/anaphylaxis					
Locate student's Health Care Plan and Epi Pen if applicable. Use school's standing orders and Epi Pen if warranted- choose correct Pen					
Review Criteria for giving Epi Pen, have another adult call 911, parents, and Health Coordinator.					
Perform five "Rights" 1. Right Person - make sure the Epi Pen you have is for that student 2. Right Drug – Check Epi Pen label for correct student 3. Right amount – Check label and compare to order 4. Right time - make sure symptoms and orders warrant administration 5. Right method of administration – follow procedure					
Perform Epi Pen injection procedure: 1. Choose correct Pen, based on weight, 65 lbs or less Epi Pen Jr. 2. Pull off blue safety cap 3. Swing and jab firmly into upper thigh or through clothing if needed 4. Hold into place for 10 seconds 5. Remove Pen and massage area. 6. Handle the Pen carefully due to the needle being exposed. Send it to ER with the student.					
Document time given and reassure student					
Monitor student carefully for breathing difficulties.					
Start CPR if needed					

Improvement Plan if Tasks not performed well:

Trained Personnel Signature _____

Registered Nurse Signature _____

Date _____