

ANAPHYLAXIS PREPAREDNESS GUIDELINES

Alabama State Department of Education Office of Learning Support Prevention and Support Services P. O. Box 302101 Montgomery, Alabama 36130-2101

Thomas R. Bice State Superintendent of Education

ALABAMA STATE BOARD OF EDUCATION

Governor Robert J. Bentley - President

Al Thompson	District 1
Betty Peters	District 2
Stephanie W. Bell	District 3
Yvette M. Richardson, Ed.D., President Pro Tem	District 4
Ella B. Bell	District 5
Cynthia McCarty, Ph.D.	District 6
Jeff Newman, Vice President	District 7
Mary Scott Hunter, J.D.	District 8

Thomas R. Bice - Secretary and Executive Officer

Table of Contents

Anaphylaxis Preparedness Guidelines	
Introduction	1
Law	1
Responsibilities of Personnel	2
Section 1: School System Superintendent	2
Section 2: School Administrator (Principal or Assistant Principal)	2
Section 3: School Nurse	2-3
Section 4: Medical Director	3
Section 5: Food Service Staff	3-4
Section 6: Transportation Staff	4
Section 7: Teachers and Other Unlicensed Personnel	4-6
Background	4
Pathophysiology and Treatment	5
Creating an Allergen-Safe School Environment	5
Identifying the School Team	5
Action Steps for Anaphylaxis Management	6
Medication Safety	6
Appendices	7
Appendix A: Epinephrine Delivery Verification	7
Appendix B: Skills Checklist	8
Appendix C: Protocol	9
Appendix D: Medication Administration	10-11
References	12

Anaphylaxis Preparedness Guidelines

Introduction

Anaphylaxis is a life-threatening allergic reaction that may involve multiple body systems. Food allergies are the leading cause of anaphylaxis in children.

Children who have asthma and food allergies are at greater risk for anaphylaxis and may often react more quickly, requiring aggressive and prompt treatment.

Anaphylaxis is a medical emergency that requires immediate intervention and treatment. Not everyone affected by anaphylaxis will experience the same thing, but common symptoms include hives, itching, flushing and swelling of the lips, tongue and roof of the mouth.

Epinephrine is the emergency drug of choice for treatment of an anaphylactic reaction and must be given immediately.

 $EpiPen^{\text{(epinephrine)}}$ 0.3 mg and $EpiPen\,Jr^{\text{(epinephrine)}}$ 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 self-administration as emergency supportive therapy only. Seek immediate emergency medical treatment after use.

 $Auvi-Q^{TM}$ (epinephrine injection, USP) is used to treat life-threatening allergic reactions (anaphylaxis) in people who are at risk for or have a history of these reactions.

Law

Alabama Act No. 2014-405, Anaphylaxis Preparedness Program, passed in the regular legislative session. The Anaphylaxis Preparedness Program shall incorporate the following three levels of prevention initiated by licensed public school nurses as a part of the health services programs:

- (1) Level I Primary Prevention: Education programs that address food allergies and anaphylaxis through both classroom and individual instruction for staff and students.
- (2) Level II Secondary Prevention: Identification and management of chronic illness.
- (3) Level III Tertiary Prevention: The development of a planned response to anaphylaxis-related emergencies in the school setting.

Each local board of education may collaborate with a physician to develop and maintain a protocol for emergency response that shall include a supply of premeasured, auto-injectable epinephrine on each public school campus to treat potentially life-threatening allergic reactions. Single-dose auto-injectable epinephrine may be administered or provided to school children by the school nurse **OR UNLICENSED SCHOOL PERSONNEL WHO HAVE COMPLETED AN ANAPHYLAXIS TRAINING PROGRAM** conducted by a nationally recognized organization experienced in training laypersons in emergency health treatment or other

medication administration programs approved by the Alabama State Department of Education (ALSDE) and Alabama Board of Nursing (ABN).

The learning objectives for each school are shown below.

- Common causes of emergency allergic reaction.
- How to recognize specific warning signs of a possible emergency allergic reaction.
- Correct use of epinephrine for emergency allergic reactions.

Responsibilities of Personnel

Section 1: School System Superintendent

- Provide leadership and designate school district resources to implement the school district's approach to managing severe allergies.
- Promote, disseminate and communicate anaphylaxis allergy-related policy to all school staff, families and the community.
- Ensure that each school has a team that is responsible for allergy management.
- Be familiar with federal and state laws, including regulations, and policies relevant to the obligations of schools to students with severe allergies, and make sure district policies and practices follow these laws.
- Support professional development on anaphylaxis for employees.

Section 2: School Administrator (Principal or Assistant Principal)

- Coordinate planning and implementation of a comprehensive Anaphylaxis Allergy Management and Prevention Plan for the school in conjunction with school nurse and school improvement team.
- Communicate school district policy for managing severe allergies to all school staff, substitute teachers, classroom volunteers and families.
- Share information about students with severe allergies with all staff members **who need to know**, provided the exchange of information occurs in accordance with FERPA and any other federal and state laws that protect the confidentiality or privacy of student information.
- Support professional development on anaphylaxis for employees.

Section 3: School Nurse

- Take the lead in planning and implementing the school's Anaphylaxis Allergy Management Prevention Plan.
- Support partnerships among school staff and the parents and doctors (e.g., pediatricians or allergists) of students with severe allergies.
- Make sure that students with severe allergies are identified and share information with other staff who need to know in accordance with FERPA and any other federal and state laws that protect the confidentiality or privacy of student information.

- Develop an Individual/Emergency Care Plan for each student with a severe allergy and share with appropriate staff.
- Have the epinephrine kept in a secure place that staff can get to quickly and easily.
- Regularly inspect the expiration date on all stored epinephrine auto-injectors.
- Annually train staff members how to administer an epinephrine auto-injector and recognize the signs and symptoms of food allergy reactions and anaphylaxis.
- Make sure that food service staff are aware of what actions must be taken as written in ECP if a food allergy emergency occurs in the cafeteria.
- Make sure that staff plan for the needs of students with food/latex/insect allergies during class field trip and during other extracurricular activities.
- Work with other school staff and parents to create a safe environment for students with severe allergies.

Section 4: Medical Director

- Serve as a Medical Director on a consultation basis in the school system, supporting the coordinated approach to managing severe allergies and anaphylaxis and the use of epinephrine in the schools, and having prescriptive authority.
- Support partnerships among school staff and the parents and doctors (e.g., pediatricians or allergists) of students with severe allergies.
- Guide and support the allergy management practices of school nurses in accordance with the Nurse Practice Act and federal or state legislation.

Section 5: Food Service Staff

- Identify, with the assistance of the school nurse, students with severe allergies in a way that does not compromise students' privacy or confidentiality rights.
- Make sure to have and understand dietary orders or the doctor's statement and other relevant medical information that is needed to make meal accommodations for students with food allergies.
- Follow policies and procedures to prevent allergic reactions and cross-contact of potential food allergens during food preparation and service.
- Manage food substitutions for students with food allergies.
- Complete annual training to help recognize following:
 - ✓ Signs and symptoms of allergic reactions and how they are communicated by students.
 - ✓ How to read food labels and identify allergens.
 - ✓ How to use an epinephrine auto-injector (if delegated and trained to do so).
 - ✓ How to deal with emergencies in the school in ways that are consistent with a student's ECP.
 - ✓ When and how to call EMS and parents.
 - ✓ How FERPA, USDA, and other federal and state laws that protect the privacy and confidentiality of student information apply to students with food allergies and food allergy disabilities.
 - ✓ General strategies for reducing or preventing exposure to food allergens in the classroom, such as cleaning surfaces, using nonfood items for celebrations, and getting rid of nonfood items that contain food allergens (e.g., clay, paste).

✓ Policies on bullying and discrimination against all students, including those with food allergies.

Section 6: Transportation Staff

- Understand information provided by the school nurse on emergency care plan for managing students with severe allergies being transported to or from school.
- Understand and complete annual training to help you recognize the following:
 - ✓ Signs and symptoms of severe allergy and how they are communicated by students.
 - ✓ How to respond to a severe allergy emergency while transporting children to and from school.
 - ✓ How to use an epinephrine auto-injector (if delegated and trained to do so).
 - ✓ How to deal with emergencies in a way that is consistent with a student's ECP or transportation emergency protocol.
 - ✓ FERPA, USDA, and other federal and state laws that protect the privacy or confidentiality of student information and other legal rights of students with severe allergies.
 - ✓ Policies that prohibit discrimination and bullying against all students, including those with food/latex/insect allergies.

Section 7: Teachers and Other Unlicensed Personnel

- Receive emergency care plan from school nurse and understand the essential actions needed to be taken to help manage severe allergy reactions under your supervision, including when meals or snacks are served in the classroom, on field trips, or during extracurricular activities.
- Work with parents and the school nurse and other appropriate school personnel to determine if any classroom modifications are needed.
- Share information and responsibilities with substitute teachers and other adults who regularly help in the classroom (para educators, aides, instructional specialists) if permitted by the parents.
- Complete training to help you recognize and understand the following:
 - ✓ Signs and symptoms of severe allergies and how they are manifested in and communicated by students.
 - ✓ How to read food labels and identify allergens.
 - ✓ How to use an epinephrine auto-injector (if delegated and trained to do so).
 - ✓ How to respond to food allergy emergencies in ways that are consistent with a student's ECP, if appropriate; a Section 504 Plan; or IEP, if appropriate.
 - ✓ When and how to call EMS and parents.

Background

The Local Education Agency (LEA) recognizes the growing concern with severe life-threatening allergic reactions, especially with regard to food items. Other common causes of anaphylaxis include allergies to latex, medications, and insect stings.

Pathophysiology and Treatment

Anaphylaxis can affect almost any part of the body and cause various symptoms. The most dangerous symptoms include breathing difficulties and a drop in blood pressure or shock, which are potentially fatal.

Medications used for treatment include:

- o Epinephrine
- o Antihistamines

Treatment of anaphylaxis is centered on treating the rapidly progressing effects of the histamine release in the body with epinephrine. The allergen should also be removed immediately.

Creating an Allergen-Safe School Environment

The LEA supports the three levels of prevention through its methods of creating an allergen-safe environment.

Level I – Primary Prevention – Promotes health and protects against threats before problems occur with food allergy and anaphylaxis awareness and training.

Level II – Secondary Prevention – Detects and treats problems early, as in a first–time reaction at school with staff or students. Early treatment of anaphylaxis saves lives.

Level III – Tertiary Prevention -

- o Protecting a student from exposure to offending allergens is the most important way to prevent life-threatening anaphylaxis.
- o Avoidance of exposure to allergens is the key to preventing a reaction.
- The risk of exposure to allergens for a student is reduced when the school personnel, medical provider and parent/guardian work together to develop a management plan for the student.
- o Educating the entire school community about life-threatening allergies is important in keeping students with life-threatening allergies safe.

Identifying the School Team

School System Administration – School administrators will support the Anaphylaxis Preparedness Program by helping to monitor the medication supply for availability and by keeping it in a secure but accessible location. It is recommended that it be stored inside the alarmed wall cabinets in each school office. These cabinets are clearly marked and are the location where the Automated External Defibrillators (AEDs) are stored. Support will also be provided to ensure that school staff are trained and retrained as deemed necessary.

- School Nurse School nurses will be the Anaphylaxis Preparedness Program site coordinator for each campus. Each school nurse will work with the principal to ensure staff are trained and retrained as deemed necessary. The school nurses will also monitor the safety and security of the medication by checking the expiration date and inspecting the medication to see if any tampering has occurred. The school nurse will respond to emergencies when possible and continue to function in the role as school nurse with other duties.
- School Medical Director Dr. _____has agreed to serve as the medical director providing authorization for this program. He will assist with program oversight and strive to

- meet practices offered through research on the topic of anaphylaxis, offering his guidance for the nursing protocols and prescriptive authority.
- Teachers Teachers will be provided information each year on the school program, the signs and symptoms of anaphylaxis, the location of the medication and the forms. Teachers will be offered training each year to recognize and respond to anaphylactic emergencies.
- Food Service Personnel Food service personnel will be provided information each year on the school program, the signs and symptoms of anaphylaxis, the location of the medication, and the forms. The food service personnel will be offered training each year to recognize and respond to anaphylactic emergencies.
- Coaches, Athletic Directors, and After-School Volunteers These people will be provided information each year on the school program, the signs and symptoms of anaphylaxis, the location of the medication, and the forms. Coaches will be offered training each year to recognize and respond to anaphylactic emergencies.
- Transportation Personnel These people will be provided information each year on the school program, the signs and symptoms of anaphylaxis, the location of the medication, and the forms. Bus drivers will be offered training each year to recognize and respond to anaphylactic emergencies.

Action Steps for Anaphylaxis Management

- Providing necessary precautions and general training for staff in transportation, classrooms, the cafeteria, or the gymnasium.
- Training by licensed registered professional nurses for all adults in a supervisory role in the recognition and emergency management of a specific medical condition for specific students.
- Creating Individual Health Care Plans (IHP), Emergency Care Plans (ECP), 504 Plans, or Individualized Educational Plans (IEP) as indicated.
- Having standing emergency medical protocols for nursing staff.
- Maintaining stock supplies of life-saving emergency medications, such as EpiPens, in all health offices for use in first-time emergencies.
- Following specific legal documents duly executed in accordance with the regulations and laws with medical orders regarding the care of specific students with severe life-threatening conditions.
- Allowing self-directed students as assessed by the school nurse to carry life-saving medication with prior approval by the medical provider and according to health practice and procedures as long as duplicate life-saving medication is also maintained in the health office in the event the self-carrying student misplaces his/her medicines.
- Assuring appropriate and reasonable building accommodations are in place within a reasonable degree of medical certainty.

Medication Safety

Epinephrine auto-injectors will be maintained by the school system to include resupplying as necessary. (Required forms in Appendices A - D)

Epinephrine Auto-injector Delivery Verification

SCHOOL NAME		DATE	
T 1 1 1	r 1	Г. Б.	
Label number	Lot number	Exp. Date	
Label number	Lot number	Exp. Date	
Location to be stored			
Administrator			
Printed Name	Signature	Date	
School Nurse			
Drinted Name	Signatura	Data	
Printed Name	Signature	Date_	

Skills Checklist Epinephrine Auto-Injector

Name of Trainee			

		Training	Demo	Review	Review	Comments	Initials
States name an	nd purpose of procedure	Ŭ					
	es symptoms for use of						
epin	ephrine auto-injector						
Preparation							
	iews universal precautions						
2. Ider	ntifies location of medication						
3. Posi	tions student into lying tion						
	ntifies possible problems and ropriate actions						
5. Kno	ows to call 911 when						
epin	ephrine auto-injector is used			-			
Identifies supp							
1. Glo							
	nt medication			_			-
Procedures							
	olies gloves						
auto	noves end cap from p-injector						
	es tip of auto-injector on er side of outer thigh						
	ses hard into thigh until the hanism injects						
	d firm pressure for 10						
6. Rem caut stick	noves auto-injector with ion to avoid accidental needle						
	sages injection site for 10 ands to help absorption						
mor	rates feet of victim and nitors breathing						
	es time of injection						
Follow up							
	tacts parent and school nurse						
	es 911 empty auto-injector						
	cards used supplies						
	cuments the incident and gives ort to the school nurse.						

Signature of Trainee	Date
Signature of School Nurse	Date

Protocol

This **protocol** is to be used in the care of children and adults who present with signs and symptoms of a severe allergic reaction while at school or at a school-related event.

Anaphylaxis is a life-threatening allergic reaction that may involve multiple body systems. This is a medical emergency that requires immediate intervention and treatment.

Possible causes of anaphylaxis are food allergies (milk, eggs, peanuts, tree nuts, shellfish, wheat, soy), insect stings (bees, hornets, yellow jackets, wasps, fire ants), latex allergies, medication, and exercise and temperature extremes (rare).

Food allergies are the leading cause of anaphylaxis in children. Children who have asthma and food allergies are at greater risk for anaphylaxis and may often react more quickly requiring aggressive and prompt treatment.

Symptoms of anaphylaxis may include any or several of the following:

- Skin: Swelling of face, lips, mouth, tongue, and throat.
- *Respiratory:* Difficulty swallowing; hoarseness, a person struggling to breath, making loud noises while trying to move air in and out of lungs.
- Cardiovascular: Collapse of vascular system, blue lips or face, low blood pressure; shock.

Epinephrine is the emergency drug of choice for treatment of an anaphylactic reaction and must be given immediately. There should be no delay in the administration of epinephrine.

- 1. Administer epinephrine based on individual's weight:
 - Epinephrine auto-injection (EpiPen, JR.)USP (0.15mg IM dose of epinephrine from epinephrine injection 1:1000 USP) for children weighing 33-66 pounds.

<u>OR</u>

- Epinephrine auto-injection (EpiPen) USP (0.3mg IM dose of epinephrine from epinephrine injection 1:1000 USP) for individuals weighing over 66 pounds.
- 2. Call EMS (911) and report anaphylactic episode. *EMS transport should be informed that epinephrine has been given.
- 3. Place individual on back with legs elevated.
- 4. Notify parents/guardians/alternate adults.
- 5. Be prepared to begin CPR for respiratory arrest and have AED available.
- 6. Monitor and document heart rate; respiratory rate, respiratory effort, level of consciousness, and any progression of symptoms every few minutes or more frequently if indicated and until help arrives.
- 7. Prepare individual for EMS transport. EMS may need a demographic sheet on the individual.
- 8. Notify school nurse so that epinephrine auto-injector can be re-ordered.
- 9. Complete a student/staff injury report and forward to the proper administrators.

APPROVED:	
Physician Authorization	Date

Appendix D Medication Administration 1 of 2

Medication Administration

Student Demographics and Health History
1. School District: Name of School:
2. Age: Type of Person: Student
If yes, was allergy action plan available? Yes \(\) No \(\) Unknown \(\) History of anaphylaxis: Yes \(\) No \(\) Unknown \(\)
Previous epinephrine use: Yes No Unknown Diagnosis/History of asthma:
School Plans and Medical Orders
5. Individual Health Care Plan (IHCP) in place? Yes No Unknown
6. Written school district policy on management of life-threatening allergies in place? Yes \(\sqrt{No} \sqrt{No} \sqrt{Unknown} \sqrt{Unknown} \sqrt{\qquad}
7. Does the student have a student specific order for epinephrine? Yes \(\sqrt{No} \sqrt{Unknown} \)
8. Expiration date of epinephrine Unknown
Epinephrine Administration Incident Reporting
9. Date/Time of occurrence:Vital signs: BP/Temp Pulse Respiration
10. If known, specify trigger that precipitated this allergic episode.
Food Insect Sting Exercise Medication Latex Other Unknown
If food was a trigger, please specify which food
Please check: Ingested Touched Inhaled Other specify
11. Did reaction begin prior to school? Yes No Unknown U
12. Location where symptoms developed:
Classroom Cafeteria Health Office Playground Dus Other specify
13. How did exposure occur?
14. Symptoms: (Check all that apply) Respiratory Cough Abdominal discomfort Angioedema Chest discomfort Diaphoresis Difficulty breathing Hoarse voice Nasal congestion/rhinorrhea Swollen (throat, tongue) Shortness of Breath Stridor Tightness (chest, throat) Neezing GI Skin Cardiac/Vascular Other Cyanosis Cyanosis Irritability General pruritis Dizziness Loss of consciousness Headache Red eyes Shortness of Breath Vomiting Localized rash Tachycardia Utterine cramping
For Office Use: Original report to School Nurse on campus where incident occurred; School Nurse will forward a copy to Health Services at CO

Medication Administration

15. Location where epinephrine administered: Health Office Other specify
16. Location of epinephrine storage: Health Office Other specify
17. Epinephrine administered by: RN Self Other Epinephrine was student-prescribed or school stock If epinephrine was self-administered by a student at school or a school-sponsored function, was the student formally trained? Yes If known, date of training No Did the student follow school protocols to notify school personnel and activate EMS? Yes No NA
If epinephrine was administered by other, please specify
18. Time elapsed between onset of symptoms and communication of symptoms:minutes
19. Time elapsed between communication of symptoms and administration of epinephrine:minutes Parent notified of epinephrine administration: (time)
20. Was a second epinephrine dose required? Yes \(\square\) No \(\square\) Unknown \(\square\)
If yes, was that dose administered at the school prior to arrival of EMS? Yes \(\square\) No \(\square\) Unknown \(\square\)
Approximate time between the first and second dose
Biphasic reaction: Yes No Don't know Don't know
Disposition
21. EMS notified at: (time) Transferred to ER: Yes \[\] No \[\] Unknown \[\]
If yes, transferred via ambulance
22. Hospitalized: Yes 🗌 If yes, discharged after days No 🗍 Name of hospital:
23. Student/Staff/Visitor outcome:
If first occurrence of allergic reaction:
a. Was the individual prescribed an epinephrine auto-injector in the ER?
b. If yes, who provided epinephrine auto-injector training?
c. Did the ER refer the individual to PCP and/or allergist for follow-up? Yes No Don't know School Follow-up
24. Did a debriefing meeting occur? Yes No Did family notify prescribing MD? Yes No Unknown Unknown
25. Recommendation for changes: Protocol change Policy change Educational change Information sharing Information Sharing
27. Form completed by: Date:
(please print) Title: Phone number: () Ext.: Email :
For Office Heat Original report to calculations on assessment in ideal and ideal
For Office Use: Original report to school nurse on campus where incident occurred; school nurse will forward a copy to Health Services at CO

References

National Association of School Nurses (2013) Food allergy and anaphylaxis

Many thanks to Dr. Darrell Cooper, Superintendent, Alexander City Schools, and Mrs. Melanie Sharpton, MSN, RN, for being leaders in anaphylaxis preparedness. www.alexcityschools.net