

**HADDONFIELD PUBLIC SCHOOLS  
AUTHORIZATION FOR ADMINISTRATION OF EPINEPHRINE**

The New Jersey State Law and the Haddonfield Board of Education require a healthcare provider's written order and parent/guardian authorization for a nurse to administer epinephrine. This medication must be in a pharmacy prepared container and labeled with the name of the student, the healthcare provider's name and date:

**HEALTHCARE PROVIDER'S ORDER**

Student Name \_\_\_\_\_ D.O.B. \_\_\_\_\_ Grade \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

The above named student is under my care for: \_\_\_\_\_

History of anaphylaxis is: Actual \_\_\_\_\_ Potential \_\_\_\_\_

Description: \_\_\_\_\_  
\_\_\_\_\_

Signs of Allergic Reaction:

Mouth (Itching, swelling of oral area)	_____	Throat (Tightness, cough, hoarseness)	_____
Skin (Hives, rash, swelling of face/extremities)	_____	GI (Nausea, vomiting, abdominal cramps/diarrhea)	_____
Lungs (Shortness of breath, cough/wheeze)	_____	Heart (Rapid, thready pulse)	_____

Medication: \_\_\_\_\_ Dosage: \_\_\_\_\_

To be given for: \_\_\_\_\_

Medication: \_\_\_\_\_ Dosage: \_\_\_\_\_

To be given for: \_\_\_\_\_

This student has been trained and is able to self-administer the prefilled auto injector mechanism of epinephrine.  
Yes \_\_\_\_\_ No \_\_\_\_\_

If the student is unable to self-administer the epinephrine, the certified school nurse will administer the epinephrine. If, for any reason, the certified school nurse is unable to administer the epinephrine, a predetermined delegate trained by the school nurse will administer the epinephrine. If, for any reason, the predetermined delegate is unable to administer the epinephrine, 9-1-1 will be called to support the student. **Antihistamines cannot be given by the delegate. If the school nurse is not available, the delegate will administer epinephrine only and call 9-1-1.**

I understand that after the administration of epinephrine in the school setting, 9-1-1 will be called to transport the student to the nearest hospital for further evaluation and treatment.

Print Healthcare Provider's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

HEALTHCARE PROVIDER'S SIGNATURE (no stamps)

DATE

**HADDONFIELD PUBLIC SCHOOLS  
AUTHORIZATION BY PARENT/GUARDIAN FOR THE  
ADMINISTRATION OF EPINEPHRINE**

I hereby request that the pre-filled, single dose auto-injector mechanism containing epinephrine ordered for my child \_\_\_\_\_ by \_\_\_\_\_ and provided to the school by myself, be administered by the certified school nurse or the predetermined delegate assigned to my child.

I understand that the school nurse shall delegate, in consultation with the Principal and the Board of Education, another employee/s of the school district to administer a pre-filled, auto-injector mechanism containing epinephrine. (New Jersey State Board of Nursing NJSA 18A:40-12.5 and 12.6 [P.L. 199.C3687]). I understand that, if for any reason, the certified school nurse cannot administer the epinephrine, the predetermined delegate will administer the epinephrine. I understand that, if for any reason the predetermined delegate cannot administer the epinephrine 9-1-1 will be called to support my child.

I give my permission for the certified school nurse to contact the above healthcare provider with regard to my child.

I understand and agree that if the procedures specified in the NJSA 18A:40-12.5 are followed that the district of Haddonfield, the Haddonfield Board of Education or its employees or agents shall have no liability as a result of any injury arising from the administration of a pre-filled auto-injector mechanism containing epinephrine to my child.

I shall indemnify and hold harmless the district and its employees or agents against any claims arising out of the administration of a pre-filled, auto-injector mechanism containing epinephrine to my child.

I understand that after the administration of epinephrine in the school setting, 9-1-1 will be called to transport the student to the nearest hospital for further evaluation and treatment.

PRINT PARENT/GAURDIAN NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

DATE: \_\_\_\_\_

\_\_\_\_\_  
PARENT/GUARDIAN SIGNATURE

\_\_\_\_\_  
RELATIONSHIP TO CHILD

\*This Authorization is effective only for the school year in which it is granted. N.J.S.A. 18A:40-12.5

# Epi-Pen Delegate Training

## **Definition of Anaphylaxis:**

Anaphylaxis is a severe, potentially fatal allergic reaction. During anaphylaxis, allergic symptoms can affect several areas of the body and may threaten breathing and blood circulation. Food allergy is the most common cause of anaphylaxis, although allergies to insect stings, medications, or latex are other potential triggers. Rarely, anaphylaxis is triggered by exercise. Another uncommon form of anaphylaxis occurs when a person eats a problem food and exercises soon thereafter. Sometimes anaphylaxis occurs without an identifiable trigger, but this is also very rare.

Although anyone who has a food allergy can experience anaphylaxis, the foods most likely to cause a severe reaction are peanuts, tree nuts, fish and shellfish. People who have both asthma and a food allergy are at greater risk for anaphylaxis.

Epinephrine (adrenaline) is a medication that can reverse the severe symptoms of anaphylaxis. It is given as a “shot” and is available as a self-injector that can be carried and used if needed. Epinephrine is a highly effective medication, but it must be administered promptly during anaphylaxis to be most effective. **Even if epinephrine is administered promptly and symptoms seem to subside completely, patients should always be taken to the emergency room for further evaluation and treatment.**

<i>Common causes of anaphylaxis include:</i>	<i>Less common causes of anaphylaxis include:</i>
✓ Food (most commonly - peanuts, walnuts, pecans fish, shellfish, eggs, milk, soy, and wheat)	✓ Exercise
✓ Medication	✓ Food-dependent exercise-induced anaphylaxis (occurs when a person eats a specific food and exercises within three to four hours after eating)
✓ Insect stings	✓ Idiopathic anaphylaxis (anaphylaxis with no apparent cause)
✓ Latex	

## **RECOGNIZING SYMPTOMS OF ANAPHYLAXIS.**

Part of the training should include a review of the student’s Individualized Emergency Healthcare Plan (IEHP) so that the delegate will be aware of the symptoms that may trigger an allergic reaction in that specific student. The delegate must become familiar with recognizing the symptoms of allergic or anaphylactic reactions and triggers that cause these reactions for each student as delineated in the medical orders of the student's medical home.

### **Examples of symptoms that may occur during an allergic reaction/anaphylaxis**

(The severity of symptoms can change quickly.)

- Mouth: Itching, tingling, or swelling of lips, tongue, and mouth
- Skin: Hives, itchy rash, swelling on the face or extremities
- Gut: Nausea, abdominal cramps, vomiting, diarrhea
- General: Panic, sudden fatigue, chills, feeling of impending doom

### **Examples of potentially life-threatening symptoms that may occur**

- Throat: Tightening of throat, hoarseness, hacking cough
- Lung: Shortness of breath, repetitive coughing, wheezing
- Heart: **THREADY** pulse, passing out, fainting, paleness, blueness

**If reaction is progressing, several of the above body systems may be affected.**

**Note:** While skin symptoms such as itching and hives occur in the majority of food allergic

reactions, anaphylaxis does not require the presence of such skin symptoms. **The most dangerous symptoms include breathing difficulties and a drop in blood pressure, causing shock, and are manifested by symptoms like, pallor, dizziness, faintness or passing out. Anaphylaxis is likely when any ONE of the criteria below is fulfilled\*:**

1. Acute onset of an illness (*symptoms may begin within several minutes to two hours after exposure to the allergen*) with involvement of skin/mucosal tissue, such as:

- Hives,
- Generalized itch/flush, or
- Swollen lips/tongue/uvula,

**AND**

Airway compromise, such as:

- Dyspnea (trouble getting air),
- Wheeze/bronchospasm, or
- Stridor (high-pitched breathing noises).

**OR**

Reduced blood pressure or associated symptoms, such as:

- Hypotonia (decreased muscle tone),
- Syncope (fainting),
- Pallor, dizziness, or
- Blue, weak pulse.

2. Two or more of the following after exposure to suspected or known allergen for that patient (*symptoms may begin within several minutes to two hours after exposure to the allergen*)
  - Skin/mucosal tissue, e.g., hives, generalized itch/flush, swollen lips/tongue/uvula;
  - Airway compromise, e.g., dyspnea (trouble getting air), wheeze/bronchospasm, stridor (high-pitched breathing noises);
  - Associated symptoms, e.g., hypotonia (decreased muscle tone), syncope (faint); or
  - Gastrointestinal symptoms, e.g., crampy abdominal pain, vomiting.
3. Hypotension after exposure to known allergen for that patient (*symptoms may begin within several minutes to two hours after exposure to the allergen*)
  - Infants and children: low systolic BP (age-specific) or >30% drop in systolic BP,\* or
  - Adults: systolic BP, 100 mm Hg or >30% drop from their baseline.

**Note:** Some individuals have an anaphylactic reaction, and the symptoms go away only to return a few hours later. This is called a bi-phasic reaction. Often the symptoms of the bi-phasic reaction occur in the respiratory system and take the individual by surprise. Therefore, according to the American Academy of Allergy, Asthma, and Immunology (AAAAI), after a serious reaction "observation in a hospital setting is necessary for at least four hours after initial symptoms subside because delayed and prolonged reactions may occur even after proper initial treatment." (AAAAI, Position Statement, *Anaphylaxis in schools, and other child-care setting*)

**NOTE: Delegates are not expected to measure and determine a rate of drop in blood pressure as part of epinephrine administration training.**

\* Modified from Symposium on the Definition and Management of Anaphylaxis: Summary report, *JACI*, 2006.

## STANDARDS AND PROCEDURES FOR THE EMERGENCY USE OF EPINEPHRINE AUTO-INJECTORS.

An epinephrine auto-injector is a disposable drug delivery device that is easily transportable (about the size of a magic marker) and contains a pre-measured dose of epinephrine. The autoinjector is designed to treat a single anaphylactic episode; and the device must be properly discarded (in compliance with applicable state and federal laws) after its use. It is the responsibility of the parent(s) to provide prescribed epinephrine to the school nurse. As a rule, each student should have two epinephrine auto-injectors available in case subsequent doses of epinephrine are needed to counter a severe reaction.

### Steps in the Emergency Use of an Epinephrine Auto-Injector:

1. Determine if anaphylaxis is reasonably suspected based on the symptoms identified in the student's IEHP. If there is a reasonable probability that anaphylaxis is occurring or about to occur, then treat the situation like an anaphylactic emergency.
2. Do not leave the student alone. Call 911 and then follow the district's policies and procedures for medical emergencies. Paramedics, the school nurse, the student's parents, and appropriate school administrator(s) should be notified immediately.
3. Most severe allergic reactions in children primarily involve trouble breathing. Children will likely need to sit calmly and upright as they are treated for their breathing problems.

#### HOWEVER:

- a) If there is evidence of faintness, loss of consciousness or confusion, lay the child flat. If a child is very ill and needs to be treated in a lying position with legs raised, they should stay in that position, if possible, during transportation to a hospital. Do not change to an upright position, except
  - b) If the child is vomiting, *do not* lay the child flat. If the child is *hypotensive* and vomiting, then he/she should be put down on his/her side, so that the child does not choke on the vomit.
4. Prepare to administer auto-injectable epinephrine, as indicated by the student's health care provider (physician, advanced practice nurse, or physician's assistant) on the IEHP.
    - a) Have the student sit down,
    - b) Reassure the student and avoid moving him or her, and
    - c) Check the auto-injector for expiration date and color. (To be effective, the solution in the auto-injector should be clear and colorless).
  5. Epinephrine Auto-injector Administration Procedure:
    - a) **Grasp the auto-injector in one hand and form a fist around the unit. With the other hand, pull off the safety cap.** (To avoid injecting yourself after removing the cap(s), never place your own fingers or hand over either end of the device. If you accidentally inject yourself, then use the back-up auto-injector to treat the student. You should go to the hospital emergency room as well.)
    - b) **Hold the tip of the auto-injector near the student's outer thigh.** (The auto-injector can be injected through the student's clothing, if necessary.)
    - c) **Press firmly and hold the tip into the OUTER THIGH so that the auto-injector is perpendicular (at a 90° angle) to the thigh.** You may hear a click.
    - d) **Hold the auto-injector firmly in place for 10-15 seconds.** (After the injection, the student may feel his or her heart pounding. This is a normal reaction.)
    - e) **Remove the auto-injector from the thigh and massage the injection area for several seconds.**

- f) **Check the tip.** If the needle is exposed, the dose has been delivered. If the needle is not exposed, repeat steps b through e.
  - g) **Dispose of the auto-injector in a "sharps" container or give the expended autoinjector to the paramedics.**
  - h) **Call 911, if not previously called.**
  - i) **Call for the school nurse, if not previously called.**
6. If the anaphylactic reaction is due to an insect sting, remove the stinger (if there is one) as soon as possible after administering the auto-injector. Remove the stinger quickly by scraping with a fingernail, plastic card, or piece of cardboard. Apply an ice pack to the sting area. Do NOT push, pinch, or squeeze, or further imbed the stinger into the skin because such action may cause more venom to be injected into the student.
  7. Observe the student. In some circumstances a second administration of epinephrine may be necessary. The school nurse, who is responsible for delegating the administration of epinephrine, must determine that the delegate is competent to administer a second dose of epinephrine in accordance with the written orders from the medical home, the policies and procedures of the district or nonpublic school and the circumstances involved in the emergency.
  8. Monitor the student's airway and breathing. If trained in CPR, begin CPR immediately if the student stops breathing.
  9. Give a copy of the IEHP to the emergency responders. When emergency responders arrive, tell them the time epinephrine was administered and the dose administered. If the autoinjector has not been disposed of in a sharps container, give the expended auto-injector to the paramedics.
- Note:** Any student who receives epinephrine should be transported to a hospital emergency room, even if symptoms appear to have subsided. If ordered by a health care provider, send a spare auto-injector along with the student to the hospital. A staff member should accompany the child to the hospital and follow procedures in accordance with the district policies regarding the care of students during emergencies.
10. The school nurse should document the incident on the student's health record.

**Notes:**

- An order for antihistamine administered concurrently with epinephrine does not preclude the emergency administration of epinephrine; however, the antihistamine cannot be given by the delegate even if specified in the IEHP because the statute at N.J.S.A. 18A:40-12.6 only authorizes the delegation of epinephrine.
- Medical orders that impose a required observation period between administration of an antihistamine and epinephrine are not recommended, in general, and cannot be delegated.

### **Storage of Epinephrine Auto-Injectors:**

Epinephrine auto-injectors should be **stored at room temperature** until the marked expiration date, at which time the unit must be replaced. Auto-injectors should not be refrigerated as this could cause the device to malfunction. Auto-injectors should not be exposed to extreme heat (such as in the glove compartment or trunk of a car during the summer) or to direct sunlight. Heat and light shorten the life of the product and can cause the epinephrine to degrade. To be effective, the solution in the auto-injector should be clear and colorless.

P.L. 2007, c. 57 requires that epinephrine auto-injectors be kept in unlocked secure locations to be readily available during an emergency. This will vary depending upon the student's schedule and the circumstances surrounding the possible emergency. In addition to the nurse's office, possible locations for unlocked secure storage of epinephrine include the principal's office, the cafeteria, a classroom, the teacher's room, on the person of the designee, etc. Availability of epinephrine should be addressed in the IEHP) and during the training of the designee by the school nurse.

**REMINDER:** Epinephrine is medication held by the school through the authorization of a health care provider's order. Only school nurses, designees, or students, able to self-medicate, should have epinephrine auto-injectors on their person.

### **III. EMERGENCY FOLLOW-UP**

After epinephrine has been administered, emergency medical care **MUST** be obtained immediately because severely allergic students who have experienced anaphylaxis may need emergency respiratory care, cardiac care, or even resuscitation if they stop breathing. At a minimum, these students will need professional care to determine whether additional epinephrine, steroids, antihistamines, or other treatment is required. Follow-up diagnosis and care by health care professionals after the administration of epinephrine is important for recovery. A delayed or secondary reaction may occur. Therefore, the student needs to remain under medical supervision for at least four hours after an episode of anaphylaxis.

### **IV. POLICIES AND PROCEDURES**

It is strongly recommended but not required that school personnel volunteering to be trained to administer auto-injectable epinephrine also receive instruction and maintain current certification in cardiopulmonary resuscitation from a recognized provider such as the American Red Cross or the American Heart Association.

#### **Statutory Requirements**

N.J.S.A. 18A:40-12.6b and c require district boards of education or chief school administrators of nonpublic schools to implement guidelines and recruit and train volunteers.

N.J.S.A. 18A:40-12.5 requires district boards of education or chief school administrators of nonpublic schools to develop a policy for the emergency administration of epinephrine.

#### **District Board of Education Policies**

N.J.A.C. 6A:16-1.4(a)1 requires district boards of education to develop and adopt written policies, procedures, mechanisms or programs governing the care of any student who becomes injured or ill while at school or during participation in school-sponsored activities.

N.J.A.C. 6A:16-1.4(a)2 requires district boards of education to develop and adopt written policies, procedures, mechanisms or programs governing the transportation and supervision of any student determined to be in need of immediate medical care.

N.J.A.C. 6A:16-1.4(a)7 requires district boards of education to develop and adopt written policies, procedures, mechanisms or programs governing the emergency administration of

epinephrine to a student for anaphylaxis pursuant to N.J.S.A. 18A:40-12.5.

N.J.A.C. 6A:16-2.1(a)2iv requires district boards of education to develop and adopt written policies, procedures and mechanisms for the provision of health, safety and medical emergency services and ensure that staff are informed, as appropriate, regarding the administration of medication, including school employees trained and designated by the school nurse to administer epinephrine in an emergency pursuant to N.J.S.A. 18A:40-12.5 and 12.6;

N.J.A.C. 6A:16-2.1(a)4i requires district boards of education to develop and adopt written policies, procedures and mechanisms for the provision of health, safety and medical emergency services and ensure staff are informed as appropriate regarding the provision of health services in emergency situations including the emergency administration of epinephrine pursuant to N.J.S.A. 18A:40-12.5.

N.J.A.C. 6A:7-1.4 requires boards of education shall adopt and implement written educational equity policies that promote equal educational opportunity and foster a learning environment that is free from all forms of prejudice, discrimination and harassment based upon race, creed, color, national origin, ancestry, age, marital status, affectional or sexual orientation, gender, religion, disability or socioeconomic status in the policies, programs and practices of the district board of education.

### **Written materials.**

It is the district's responsibility to prepare or obtain these materials and provide them as part of the training.

1. Training Protocols for the Emergency Administration of Epinephrine
2. New Jersey Guidelines for the Care of Students with Food Allergies

## **PART B: RECRUITING DELEGATES FOR THE MANAGEMENT OF ANAPHYLAXIS IN THE SCHOOL SETTING**

New Jersey boards of education or nonpublic school administrators, school nurses, administrators, and staff should work as a team with parents/guardians and the student at risk of anaphylaxis to promote the health, safety, and welfare of students.

New Jersey law requires local boards of education and nonpublic school administrators to develop a policy for the *emergency* administration of epinephrine for anaphylaxis. This policy should be just one of several policies created by the district or nonpublic school regarding the provision of health, safety, and medical emergency services.

The administration of medication in the school setting is the responsibility of the school nurse; however, New Jersey law requires that, as part of emergency planning, additional volunteers be trained to administer epinephrine in the absence of the school nurse. The law also protects the district, the nonpublic school administrator, the school nurse, and the delegate from liability.

### **I. THE ROLE OF SCHOOL BOARDS AND ADMINISTRATORS**

1. Develop requisite policies and procedures outlined in Section IV-Policies and Procedures.
2. Recruitment of delegates requires administrators and school nurses to work collaboratively. There is both an individual and organizational accountability for delegation.
3. Administrators should assist the school nurse in creating circumstances favorable for delegation to occur. These include:
  - a) providing sufficient resources (for example, emergency communication devices and adequate training programs),
  - b) providing opportunity for continuing professional development, including adequate and



- tangible training for both nurses and staff, and
- c) creating an environment conducive to teamwork, collaboration, and student-centered care.

4. The NJ Nurse Practice Act authorizes the nurse to delegate and the responsibility accompanying that delegation must follow the law. (N.J.S.A. 45:11-23, and N.J.A.C. 13:37-6.2)

## **II. THE ROLE OF THE SCHOOL NURSE**

1. The American Nurses Association recognizes that delegation in the school setting is an essential nursing skill. (ANA Position Statement, *Assuring Safe, High Quality Health Care in Pre-K Through 12 Educational Settings*, March 15, 2007)

<http://www.ana.org/readroom/position/practice/AssuringSafeHealthCarePreK.pdf>

2. New Jersey law specifically recognizes the administration of an epinephrine auto-injector in the school setting as a delegable task by the school nurse. This includes delegation of the auto-injector portion of the Twinject. The nurse must determine that the task, the circumstances, the directions, and supervision are appropriate, and that the risks associated with delegation are minimized. Some considerations for selecting the appropriate delegate include:

- a) Select a responsible employee who will be reasonably available to the student, particularly where and when anaphylaxis is most likely to occur,
- b) Consider the knowledge and skills of the individual(s) to whom care may be delegated, and remember that their competency will be enhanced by specific training,
- c) Consider the proximity and availability of the potential delegate, given the location(s) of the student throughout the school day, the size of the school, and after-hours and off-site school-sponsored functions,
- d) A student should be assigned as many delegates as necessary to ensure complete back-up coverage, and
- e) A staff member can serve as a delegate to more than one student, provided he/she has received specific information about each student.

3. A potential delegate is more likely to accept the delegation willingly if the school nurse explains the process with confidence and has approached the candidate thoughtfully. Initial reluctance may be overcome by providing information and reassurance.
4. The school nurse should be proactive in recruiting volunteers that may be appropriate candidates. This means identifying and approaching the candidate, describing the delegation process, and asking, though not compelling, the candidate to accept the delegation.
5. The school nurse provides training to the delegate that includes written instructions and a review of the student's IEHP.
6. The school nurse plans the delegation, based on the student's needs and available resources. The nurse provides periodic and regular evaluation and monitoring of the delegate to ensure an appropriate delegation has been made.
7. School nurses are encouraged to contact the medical home and the school physician to resolve conflicts with written orders that seem to preclude delegation.
8. The school nurse is responsible for documenting the training of each delegate for each

student annually, communicating regularly with delegates and updating the Individualized Emergency Healthcare Plan of any student with life-threatening allergies.

9. The law protects the district, the school nurse, and the delegate from liability.

### III. THE ROLE OF THE DELEGATE

The delegate is part of a team whose goal is to provide the best care for students while at school and school-sponsored functions. Although not typically a health care professional, the delegate is critical to the nurse's ability to manage the care of students with severe allergic reactions.

1. Delegates serve as a critical member of the team. A team approach to severe allergy/possible anaphylaxis management is vital i.e., school staff, students, parents, and health care providers should work together to minimize risks and provide a safe educational environment for allergic students.
2. Delegates will participate in training sessions provided by the school nurse that provide clear expectations regarding what to do, what to report, and how to ask for assistance.
3. Delegates will review written instructions from the school nurse and the IEHP including all unique student requirements and characteristics.
4. Delegates will administer epinephrine only in an emergency, when the symptoms described during delegate training are present and the nurse is unavailable.
5. Delegates will ask questions and seek clarification at any time before, during, or after training. Communication is a two-way process and is essential to the provision of services to students during emergencies.
6. Delegates may need to assist students who are permitted to carry and self-administer epinephrine before, during, or after the administration of epinephrine. These students are also entitled to a delegate when unable to self-administer their own epinephrine.
7. The law protects the district, the school nurse, and the delegate from liability.
8. Delegates should be familiar with the following information:
  - a) Allergies can be life-threatening. Exposure to offending allergens can result in *anaphylaxis*. Anaphylaxis, however, is preventable by strict avoidance of offending allergens and treatable by auto-injection of epinephrine (adrenaline) along with medical intervention.
  - b) Epinephrine is most effective for controlling severe allergic reactions in children.
  - c) Through appropriate risk-reduction and allergen-avoidance procedures, the likelihood of the need for epinephrine administration can be minimized.
  - d) Epinephrine is administered in the school setting by auto-injector. An auto-injector is a pre-measured, spring-loaded pen-like device designed for ease of use by non-medical persons in the community. No needle is even visible until the administration is complete.
  - e) The epinephrine auto-injector will be stored in secure and unlocked locations so that it can be readily available for use by the delegate in the event of an emergency. The location of the epinephrine auto-injector will be documented on the IEHP.

## PART C: APPENDIX

### V. RESOURCES

- <http://www.foodallergy.org/anaphylaxis/index.html>
- <http://www.epipen.com/howtouse.aspx>
- <http://www.twinject.com/>
- <http://www.redcross.org/services/hss/courses/>

- <http://www.aap.org/sections/allergy/child.cfm>
- <http://www.aaaai.org/>

**Note:** The American Red Cross has available a training module for administration of autoinjectable epinephrine which can be added to CPR training.

### **Disclaimer**

*The New Jersey Department of Education does not control or assure the significance, accuracy, or comprehensiveness of the cited resource information. References to resource information in this document are not intended to support any views expressed or products and services offered, nor suggest their importance. The resources identified in the manual are intended to provide schools with links to relevant information for planning, implementing, and evaluating school health procedures. Schools are encouraged to thoroughly assess their needs and investigate programs and materials before adopting them.*

## **VI. DEFINITIONS**

**Anaphylaxis** - A serious allergic reaction that is rapid in onset and may cause death. (Summary Report of the Second National Institute of Allergy and Infectious Disease/Food Allergy and Anaphylaxis Network symposium on the definition and management of anaphylaxis, *Journal of Allergy and Clinical Immunology*, February 2006).

**Auto-injector** - A pre-measured, spring-loaded pen-like device used to administer epinephrine and designed for ease of use by non-medical persons.

**Certified School Nurse** - A person who holds a current license as a registered professional nurse from the State Board of Nursing and an Educational Services Endorsement, school nurse or school nurse/non-instructional from the Department of Education pursuant to N.J.A.C. 6A:9-13.3 and 13.4.

**Delegation** - Transferring to a competent individual the authority to perform a selected nursing task in a selected situation. The nurse retains accountability for the delegation.

**Delegator** - The person making the decision to delegate the administration of epinephrine.

**Delegate/Designee** - The person receiving designation to administer epinephrine.

**Epinephrine (adrenaline)** - A drug that can be successfully utilized to counteract anaphylaxis.

**Individualized Emergency Healthcare Plan** - A personalized healthcare plan written by the certified school nurse that specifies the delivery of accommodations and services needed by a student in the event of an emergency.

**Individualized Healthcare Plan** - A plan written by the certified school nurse that details accommodations and/or nursing services to be provided to a student because of the student's medical condition based on medical orders written by a health care provider in the student's medical home.

**School-Sponsored Function** - Any activity, event, or program occurring on or off school grounds, whether during or outside of regular school hours, that is organized and/or supported by the school.

HADDONFIELD PUBLIC SCHOOLS  
EPINEPHRINE AUTO-INJECTOR TRAINING RECORD

Student's Name: \_\_\_\_\_ Trainer/School Nurse: \_\_\_\_\_

Signature: \_\_\_\_\_

*(Delegate to initial column)*

	Training completed	Training completed	Training completed	Training completed	Training completed
Date					
<b>A) Background Information</b>					
Understands the concept of universal precautions					
Stated definition of anaphylaxis					
States trigger and symptoms for child					
States potential adverse reactions					
If CPR trained, attach certification					
<b>B) Care of Anaphylactic Reaction</b>					
Determine if anaphylaxis is reasonably suspected based on the symptoms identified in the student's ECP.					
Do not leave the student alone. Call 911					
Call the parents, nurse and administrators					
Have the student sit down					
Reassure the student and avoid moving him or her					
Checks for right medication, right child					
Check the auto-injector for expiration date and color. (To be effective, the solution in the auto-injector should be clear and colorless).					
<b>Grasp the auto-injector in one hand and form a fist around the unit. With the other hand, pull off the gray safety cap.</b> (To avoid injecting yourself after removing the cap(s), never place your own fingers or hand over either end of the device. If you accidentally inject yourself, then use a back-up auto-injector to treat the student. You should go to the hospital emergency room as well.)					
<b>Hold the tip of the auto-injector near the student's outer thigh.</b> (The auto-injector can be injected through the student's clothing, if necessary.)					
<b>Press firmly and hold the tip into the OUTER THIGH so that the auto-injector is perpendicular (at a 90° angle) to the thigh. Push the auto-injector.</b> You will hear a click.					
					OVER

<b>Hold the auto-injector firmly in place for 10-15 seconds.</b> (After the injection, the student may feel his or her heart pounding. This is a normal reaction.)					
<b>Remove the auto-injector from the thigh and massage the injection area for several seconds.</b>					
<b>Check the tip.</b> If the needle is exposed, the dose has been delivered. If the needle is not exposed, repeat administration steps.					
<b>If available, dispose the auto-injector in a "sharps" container or give the expended auto-injector to the paramedics.</b>					
If the anaphylactic reaction is due to an insect sting, remove the stinger (if there is one) as soon as possible after administering the auto-injector. Remove the stinger quickly by scraping with a fingernail, plastic card, or piece of cardboard. Apply an ice pack to the sting area. Do NOT push, pinch, or squeeze, or further imbed the stinger into the skin because such action may cause more venom to be injected into the student.					
Monitor the student's airway and breathing. If trained in CPR, begin CPR immediately if the student stops breathing.					
Give a copy of the ECP to the emergency responders. When emergency responders arrive, tell them the time epinephrine was administered and the dose administered. If the auto-injector has not been disposed of in a sharps container, give the expended auto-injector to the paramedics.					
Document medication, dose, time, and location of administration.					

I hereby acknowledge that I have been trained in the administration of epinephrine according to the protocol outlined above.

Signature: \_\_\_\_\_ Initials: \_\_\_\_\_ Date: \_\_\_\_\_ D/I \_\_\_\_\_ D/I \_\_\_\_\_ D/I \_\_\_\_\_ D/I \_\_\_\_\_

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# Epi-Pen Training for the Delegate

**By: Sharon Garnier, RN  
Beth Herrera, RN  
Loretta Macconi, RN  
Peggy Petrillo, RN**

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# Purpose

- To assist staff in recognizing a *life threatening allergic reaction*.
  - To be knowledgeable on current treatment of an anaphylactic reaction.
  - To seek volunteers to become delegates to ensure the safety of our students.
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- We need delegates to ensure the safety of our students with allergies.**
- These delegates would provide assistance if needed when no parent or school nurse is available.**
- Becoming a delegate carries no liability and may save a life of a student with life threatening allergies.**





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# How do I become a delegate?

- See the school nurse for hands on EPINEPHRINE AUTO-INJECTOR training.

## Annual Training Includes:

- Viewing this PowerPoint presentation
- Reviewing specific child's allergy and Emergency Care Plan (ECP)
- Return demonstration of the use of an EPINEPHRINE AUTO-INJECTOR

***Thank You*** for helping to meet the needs of our students.

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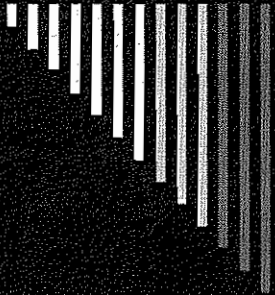


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## Definition of Anaphylaxis:

- Anaphylaxis is a severe, potentially fatal allergic reaction. During anaphylaxis, allergic symptoms can affect several areas of the body and may threaten breathing and blood circulation.
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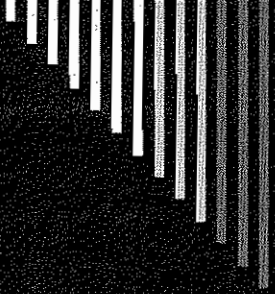


- Although anyone who has a food allergy can experience anaphylaxis.



- People who have both asthma and a food allergy are at greater risk for anaphylaxis.

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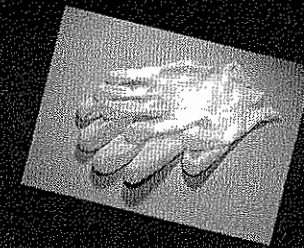
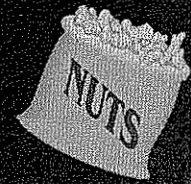


- Epinephrine (adrenaline) is a medication that can reverse the severe symptoms of anaphylaxis.
- It is given as a “shot” and is available as a self-injector that can be carried and used if needed.
- Epinephrine is a highly effective medication, but it must be administered promptly during anaphylaxis to be most effective.
- **Even if epinephrine is administered promptly and symptoms seem to subside completely, call 911 for immediate transport to the emergency room for evaluation and treatment.**



# Common causes of anaphylaxis include:

- Food (most commonly - peanuts, walnuts, pecans, fish, shellfish, eggs, milk, soy, and wheat)
- Medication
- Insect stings
- Latex (rubber gloves, elastic bands, balloons, medical supplies)



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## ***Less common causes of anaphylaxis include:***

- Exercise
- Food-dependent exercise-induced anaphylaxis (occurs when a person eats a specific food and exercises within three to four hours after eating)
- Idiopathic anaphylaxis (anaphylaxis with no apparent cause)





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# RECOGNIZING SYMPTOMS OF ANAPHYLAXIS

- ❑ Training should include a review of the student's Emergency Care Plan (ECP) so that the delegate will be aware of the symptoms that may trigger an anaphylaxis reaction in that specific student.
  - ❑ The delegate must become familiar with recognizing the symptoms of allergic or anaphylactic reactions and triggers that cause these reactions for each student as delineated in the medical orders of the student's healthcare provider (medical home).
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## Examples of symptoms that may occur during an allergic reaction/anaphylaxis:

(The severity of symptoms can change quickly)

- ❑ Mouth: Itching, tingling, or swelling of lips, tongue, and mouth
  - ❑ Skin: Hives, itchy rash, swelling on the face or extremities
  - ❑ Gut: Nausea, abdominal cramps, vomiting, diarrhea
  - ❑ General: Panic, sudden fatigue, chills, feeling of impending doom
-





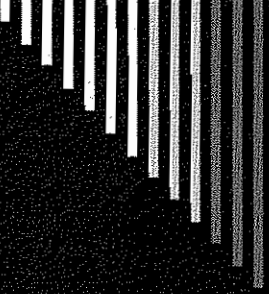
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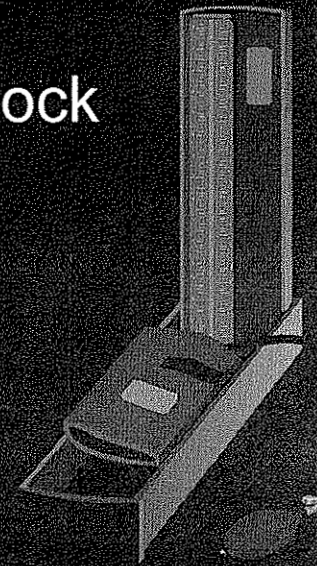
## Examples of potentially life-threatening symptoms that may occur:

- ❑ Throat: Tightening of throat, hoarseness, hacking cough
- ❑ Lung: Shortness of breath, repetitive coughing, wheezing
- ❑ Heart: **THREADY (weak)** pulse, passing out, fainting, paleness, blueness

*If reaction is progressing, several of the above body systems may be affected.*

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- **Note:** While skin symptoms such as itching and hives occur in the majority of food allergic reactions, anaphylaxis does not require the presence of such skin symptoms.
  
  - The most dangerous symptoms include:
    - breathing difficulties
    - drop in blood pressure, causing shock
    - pallor
    - dizziness
    - faintness or
    - passing out





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**Anaphylaxis is likely when any ONE of the criteria below is fulfilled:**

1. Acute onset of an illness (*symptoms may begin within **several minutes to two hours** after exposure to the allergen*) with involvement of skin/mucosal tissue, such as:

- Hives
  - Generalized itch/flush
  - Swollen lips/tongue/uvula
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**AND**

Airway compromise, such as:

Dyspnea (trouble getting air)

Wheeze/bronchospasm

Stridor (high-pitched breathing noises)

**OR**

Reduced blood pressure or associated symptoms, such as:

Hypotonia (decreased muscle tone)

Syncope (fainting)

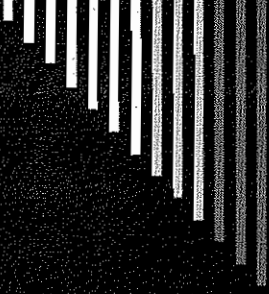
Pallor

Dizziness

Turning blue

Weak pulse

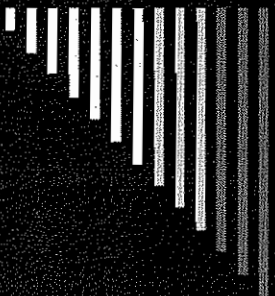
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2. In addition, after exposure to suspected or known allergen gastrointestinal symptoms such as crampy, abdominal pain and/or vomiting may occur.

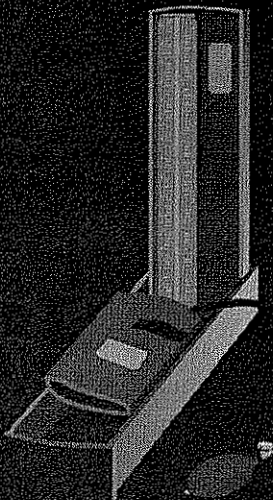
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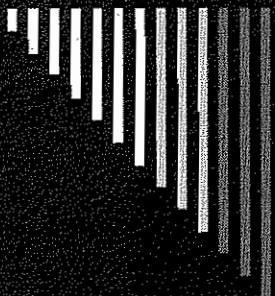


3. Hypotension (very low blood pressure) after exposure to known allergen for that patient (*symptoms may begin within **several minutes to two hours** after exposure to the allergen*)

- Infants and children: low systolic BP (age-specific) or >30% drop in systolic BP,\* or
- Adults: systolic BP, 100 mm Hg or >30% drop from their baseline.

*\*Delegates are not expected to measure and determine a rate of drop in blood pressure as part of epinephrine administration training.*



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- Bi-phasic reaction. **Note:** Some individuals have an anaphylactic reaction, and the symptoms go away only to return a few hours later.
  - Often the symptoms of the bi-phasic reaction occur in the respiratory system and take the individual by surprise. Therefore, according to the American Academy of Allergy, Asthma, and Immunology (AAAAI), after a serious reaction "observation in a hospital setting is necessary for at least four hours after initial symptoms subside because delayed and prolonged reactions may occur even after proper initial treatment." (AAAAI, Position Statement, *Anaphylaxis in schools, and other child-care setting*)

*\* Therefore, 911 must always be called!*

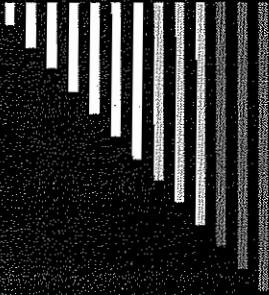


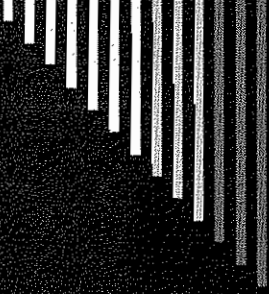
## STANDARDS AND PROCEDURES FOR THE EMERGENCY USE OF EPINEPHRINE AUTO-INJECTORS

- An epinephrine auto-injector is a disposable drug delivery device that is easily transportable (about the size of a magic marker) and contains a pre-measured dose of epinephrine. No needle is even visible until the administration is complete.





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- The auto-injector is designed to treat a single anaphylactic episode; and the device must be properly discarded (in compliance with applicable state and federal laws) after its use.
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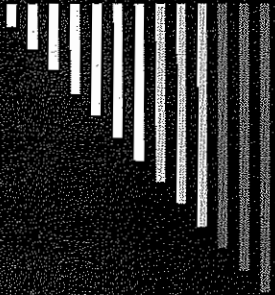
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- It is the *responsibility of the parent (s)* to provide prescribed epinephrine to the school nurse.
  - As a rule, each student should have two epinephrine auto-injectors available in case subsequent doses of epinephrine are needed to counter a severe reaction.
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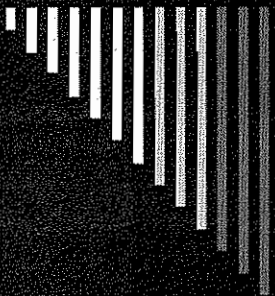
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## Steps in the Emergency Use of an Epinephrine Auto-Injector:

1. Determine if anaphylaxis is reasonably suspected based on the symptoms identified in the student's ECP.
  2. If there is a reasonable probability that anaphylaxis is occurring or about to occur, then treat the situation like an anaphylactic emergency.
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2. Do not leave the student alone. *Call 911* and then follow our district's policies and procedures for medical emergencies.
  3. Paramedics, the school nurse, the student's parents, and appropriate school administrator (s) should be notified immediately.





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3. Most severe allergic reactions in students primarily involve trouble breathing. The student will likely need to sit calmly and upright as they are treated for their breathing problems.

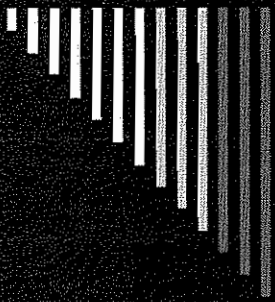
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## ***HOWEVER:***

- a) If there is evidence of faintness, loss of consciousness or confusion, lay the child flat. If a child is very ill and needs to be treated in a lying position with legs raised, they should stay in that position, if possible, during transportation to a hospital. Do not change to an upright position, except
  
  - b) If the child is vomiting, *do not* lay the child flat; he/she should be put down on his/her side, so that the child does not choke on the vomit.
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4. Prepare to administer auto-injectable epinephrine, as indicated by the student's health care provider (physician, advanced practice nurse, or physician's assistant) on the ECP.

- a) Have the student sit down,
- b) Reassure the student and avoid moving him or her,  
and
- c) Check the auto-injector for expiration date and color.

*(To be effective, the solution in the auto-injector should be clear and colorless).*

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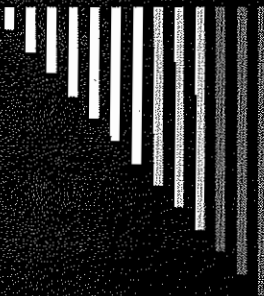
## 5. Epinephrine Auto-injector Administration Procedure:

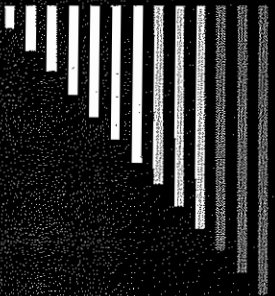
- a) **Grasp the auto-injector in one hand and form a fist around the unit. With the other hand, pull off the safety cap.**

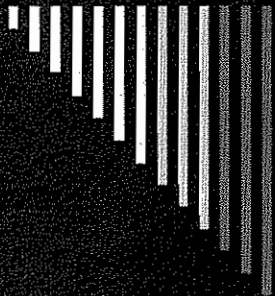
(To avoid injecting yourself after removing the cap (s), *never* place your own fingers or hand over either end of the device. If you accidentally inject yourself, then use the back-up auto-injector to treat the student. You should go to the hospital emergency room as well.)

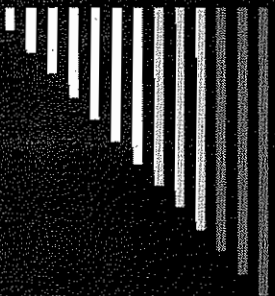
- b) **Hold the tip of the auto-injector near the student's outer thigh.** (The auto-injector can be injected through the student's clothing, if necessary.)
- c) **Press firmly and hold the tip into the OUTER THIGH so that the auto-injector is perpendicular (at a 90° angle) to the thigh.** You will hear a click.
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- d) **Hold the auto-injector firmly in place for 10-15 seconds.** (After the injection, the student may feel his or her heart pounding. This is a normal reaction.)
  - e) **Remove the auto-injector from the thigh and massage the injection area for several seconds.**
  - f) **Check the tip.** If the needle is exposed, the dose has been delivered. If the needle is not exposed, repeat steps b through e.
  - g) **Dispose of the auto-injector in a "sharps" container or give the expended auto-injector to the paramedics.**
  - h) **Call 911, if not previously called.**
  - i) **Call for the school nurse, if not previously called.**
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- 
6. If the anaphylactic reaction is due to an insect sting, remove the stinger (if there is one) as soon as possible after administering the auto-injector.
- Remove the stinger quickly by scraping with a fingernail, plastic card, or piece of cardboard.
  - Apply an ice pack to the sting area.
  - Do NOT push, pinch, or squeeze, or further imbed the stinger into the skin because such action may cause more venom to be injected into the student.
-

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7. Observe the student. In some circumstances a second administration of epinephrine may be necessary.
  8. Monitor the student's airway and breathing. If trained in CPR, begin CPR immediately if the student stops breathing.
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9. Give a copy of the ECP to the emergency responders. When emergency responders arrive, tell them the *time* epinephrine was administered and the *dose* administered. If the auto-injector has not been disposed of in a sharps container, give the expended auto-injector to the paramedics.

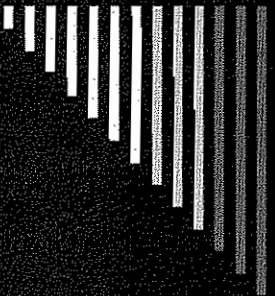
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## Note:

- Any student who receives epinephrine should be transported to a hospital emergency room, even if symptoms appear to have subsided.
- If ordered by a health care provider, send a spare auto-injector along with the student to the hospital.
- A staff member should accompany the student to the hospital and follow procedures in accordance with the district policies regarding the care of students during emergencies.





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10. The school nurse should document the incident on the student's health record.

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## Notes:

- An order for antihistamine administered concurrently with epinephrine does not preclude the emergency administration of epinephrine; however, the antihistamine cannot be given by the delegate even if specified in the ECP because the statute at N.J.S.A. 18A:40-12.6 only authorizes the delegation of epinephrine.
- Medical orders that impose a required observation period between administration of an antihistamine and epinephrine *are not recommended*, in general, and *cannot be delegated*.



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## Storage of Epinephrine Auto-Injectors:

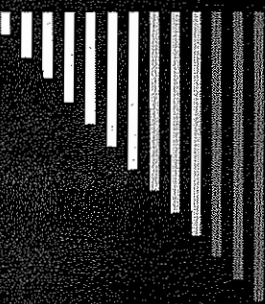
Epinephrine auto-injectors:

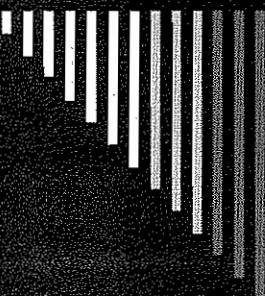
- ❑ **Should be stored at room temperature** until the marked expiration date, at which time the unit must be replaced.
- ❑ should not be refrigerated as this could cause the device to malfunction.
- ❑ should not be exposed to extreme heat (such as in the glove compartment or trunk of a car during the summer) or to direct sunlight. Heat and light shorten the life of the product and can cause the epinephrine to degrade.

*To be effective, the solution in the auto-injector should be clear and colorless.*

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- The epinephrine auto-injector will be stored in secure and unlocked locations so that it can be readily available for use by the delegate in the event of an emergency.
  - The location of the epinephrine auto-injector will be documented on the ECP.
  - This may vary depending upon the student's schedule and the circumstances surrounding the possible emergency.
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*It is strongly recommended* but not required that school personnel volunteering to be trained to administer auto-injectable epinephrine also receive instruction and maintain current certification in cardiopulmonary resuscitation from a recognized provider such as the American Red Cross or the American Heart Association.

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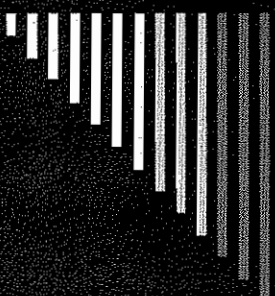


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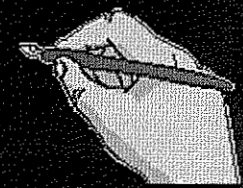
# THE ROLE OF THE DELEGATE

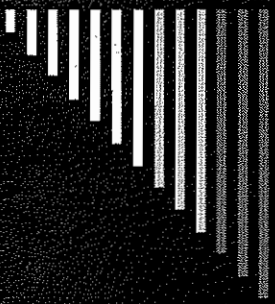
The delegate is part of a team whose goal is to provide the best care for students while at school and school-sponsored functions. Although not typically a health care professional, the delegate is critical to the nurse's ability to manage the care of students with severe allergic reactions.

1. A team approach to severe allergy/possible anaphylaxis management is vital i.e., school staff, students, parents, and health care providers should work together to minimize risks and provide a safe educational environment for allergic students.
-



2. Delegates will participate in training sessions provided by the school nurse that provide clear expectations regarding what to do, what to report, and how to ask for assistance.
3. Delegates will review written instructions from the school nurse and the ECP including all unique student requirements and characteristics.
4. Delegates will administer epinephrine only in an emergency, when the symptoms described during delegate training are present and the nurse is unavailable.
5. Delegates will administer epinephrine **ONLY** to the student (s) that have been trained to assist.





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5. Delegates will ask questions and seek clarification at any time before, during, or after training. Communication is a two-way process and is essential to the provision of services to students during emergencies.



6. Delegates may need to assist students who are permitted to carry and self-administer epinephrine before, during, or after the administration of epinephrine. These students are also entitled to a delegate when unable to self-administer their own epinephrine.

7. The law protects the district, the school nurse, and the delegate from liability.

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8. Delegates should be familiar with the following information:

- a) Allergies can be life-threatening. Exposure to offending allergens can result in *anaphylaxis*. Anaphylaxis, however, is preventable by strict avoidance of offending allergens and treatable by auto-injection of epinephrine (adrenaline) along with medical intervention.
  - b) Epinephrine is most effective for controlling severe allergic reactions in children and adults.
  - c) Through appropriate risk-reduction and allergen-avoidance procedures, the likelihood of the need for epinephrine administration can be minimized.
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Thank You for Viewing this Presentation.

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## RESOURCES

- <http://www.foodallergy.org/anaphylaxis/index.html>
  - <http://www.epipen.com/howtouse.aspx>
  - <http://www.twinject.com/>
  - <http://www.redcross.org/services/hss/courses/>
  - <http://www.aap.org/sections/allergy/child.cfm>
  - <http://www.aaaai.org/>
-