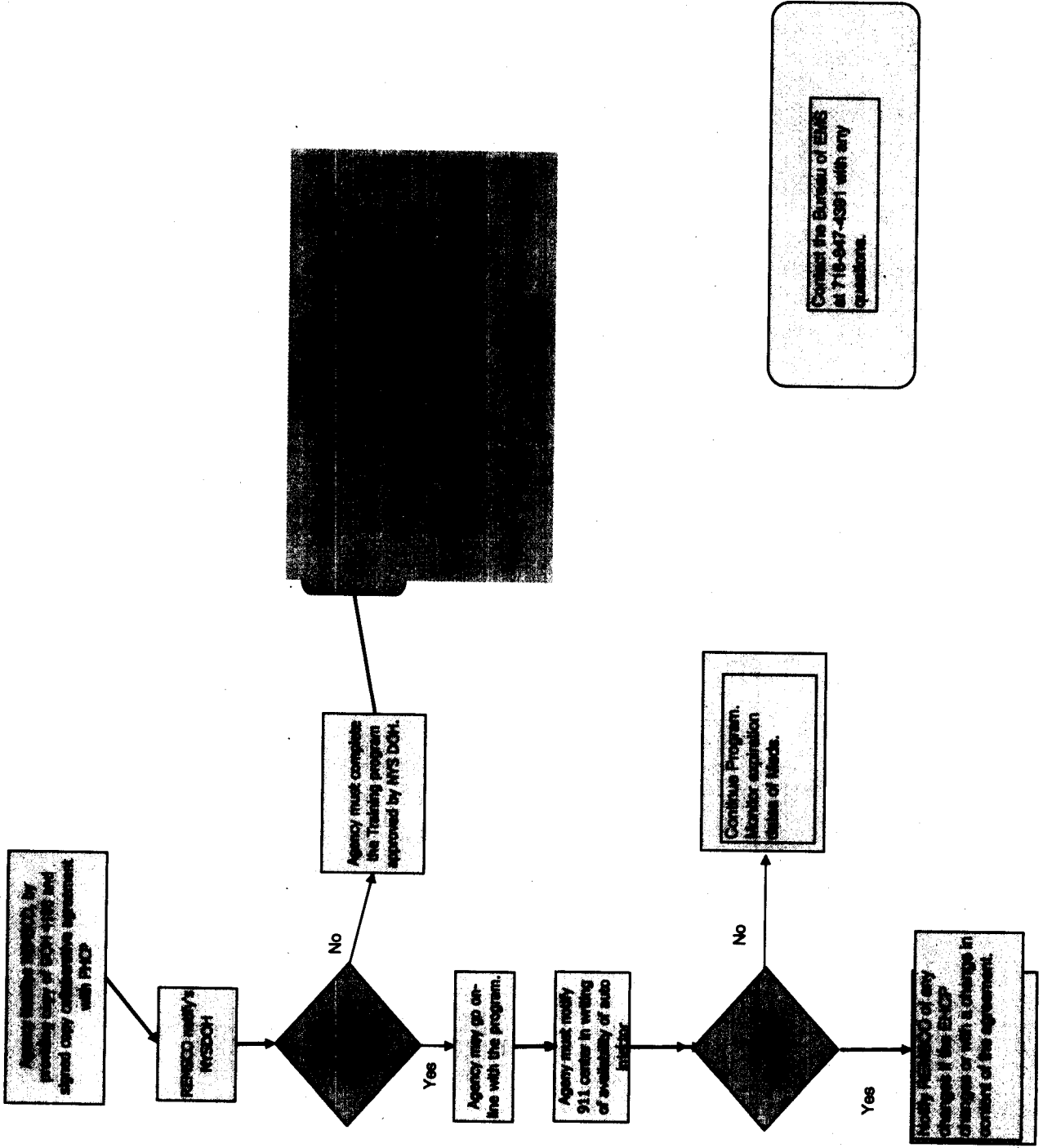


EPI/Albuterol Process





DOH
New York State
Department of Health
Bureau of Emergency Medical Services

POLICY STATEMENT

Supercedes/Updates:

No. 00 - 01

Date: 4/10/00

Re:

**Use of
Epinephrine
Auto Injectors By EMS
Agencies**

Page 1 of 2

BACKGROUND

The purpose of this policy is to explain the provisions of Chapter 578 of the Laws of 1999 authorizing the use of an epinephrine auto injector device by certain individuals in ambulance and advanced life support services and childrens' overnight, summer day or traveling camps. This change in the law is designed to encourage greater acquisition and use of epinephrine auto injectors in communities across the state in an effort to reduce the number of deaths associated with anaphylaxis from increased sensitivity to insects and certain food substances.

AUTHORIZATION

To be authorized to possess and use an epinephrine auto injector under this statute an individual or organization as defined above needs to make specific notification of intent to the local Regional Emergency Medical Services Council (REMSCO) and the Department of Health (DOH). *There are no approvals or certifications required.*

To be authorized to possess and use an epinephrine auto injector:

- Identify a physician or hospital knowledgeable and experienced in emergency cardiac care to serve as "emergency health care provider (EHCP)" and participate in a collaborative agreement. (This may be the EMS service's medical director)
- Complete a training course approved by the Commissioner of Health (Attachment 1).
- Develop with the EHCP, a written collaborative agreement which shall include at least the following:
 - written practice protocols for the use of the epinephrine auto injector;
 - written policies and procedures for the training of authorized users;
 - notice to the EHCP of the use of the epinephrine auto injector;
 - documentation of the use of the epinephrine auto injector;
 - written policy and procedure for acquisition, storage, accounting, and proper disposal of used auto-injectors.
- Provide written notice to 911 and/or the community equivalent ambulance dispatch entity of

the availability of epinephrine auto injectors at the organization's location.

- File with the REMSCO serving the area a copy of the "Notice of Intent to Possess and use an Epinephrine Auto Injector (DOH-4188) along with a signed copy of the Collaborative Agreement.
- File a new Collaborative Agreement with the REMSCO if the EHCP changes or with a change in content of the agreement.

REMSCO Actions

REMSCOs must develop a procedure for the following:

- insuring that a copy of the organization's "Notice of Intent ... (DOH-4188)" is forwarded to the Bureau of EMS.
- maintaining a copy of the "Notice of Intent... (DOH-4188) and the Collaborative Agreement.

There are no approvals or certifications required by the REMSCO.

Authorized:

Edward G. Wronski

Director

WREMS

WESTERN REGIONAL
EMERGENCY MEDICAL SYSTEM, INC.

c/o Erie County Medical Center
462 Grider Street
Buffalo, NY 14215-3098
(716) 898-5072
Fax: (716) 898-5198

Possession and Use of an Epinephrine Auto-Injector Collaborative Agreement

It is the intent of _____ to possess and use an
(Name of Agency)
Epinephrine Auto-Injector for patients in anaphylaxis. This service is being offered in
cooperation with _____
(Physician/Hospital)

In accordance with the provisions of Chapter 578 of the Laws of 1999, our organization has:

- Identified a physician or hospital to serve as our Emergency Health Care Provider (EHCP).
- Selected an approved Epinephrine Auto-Injector training course.
- Provided written notice to 911 and/or community equivalent ambulance dispatch entity of the availability of Epinephrine Auto-Injectors at our organization's location.
- Filed with the Regional Emergency Medical Services Council (REMSCO) serving the area a copy of the "Notice of Intent to Possess and Use Epinephrine Auto-Injector" (DOH-4188) along with a signed copy of this agreement.
- Agreed to file a new Collaborative Agreement with the Regional Emergency Medical Services Council (REMSCO) if the Emergency Health Care provider (EHCP) changes.
- Agreed to participate in the required Quality Improvement Program, mailing in the requested information each time the Epinephrine Auto-Injector is used.

Policies:

It is the policy of our organization that person using the Epinephrine Auto-Injector be properly trained; therefore all persons providing treatment with the Auto-Injector shall be certified by _____. They will be retrained in accordance with the certifying agency's standards. An annual review of the Epinephrine Auto-Injector and its use will be presented to each member.

It is the policy of our organization to ensure the rapid arrival of EMS; therefore 911 and/or the community equivalent dispatch entity will be called immediately when the Epinephrine Auto-Injector is used. Our primary responding ambulance is _____ (name of ambulance service). We will notify both the primary responding ambulance agency and the area 911 dispatch center of this availability in writing.

It is the policy of our organization to obtain the Epinephrine Auto-Injectors through _____. The Epinephrine Auto-Injectors will be stored _____, to be protected from exposure to light and extreme changes in temperature. After use, the Epinephrine Auto-Injectors will be disposed of in a sharps container in accordance with OSHA regulation 29CFR 1910.1030.

It is the policy of our organization to ensure the Epinephrine Auto-Injectors are in a state of readiness at all times, and that each unit is accounted for; therefore all regular maintenance, expiration date tracking, and supply accounting of the Epinephrine Auto-Injectors will be performed by _____ (name of individual/initial). Said individual will ensure that _____ (enter number) Adult Dosages and _____ (enter number) Pediatric Dosages will be carried on each Rescue Unit, and also that _____ (enter number) Adult Dosages and _____ (enter number) Pediatric Dosages will be stored in-facility as back-up stock.

It is the policy of our organization to ensure appropriateness in using the Epinephrine Auto-Injectors; therefore we will participate in the Quality Improvement program as determined by the Western Regional Emergency Medical Advisory Committee (WREMAC).

Signed in agreement...

For the Organization

Print Name

Date Signed _____

Physician/Hospital

Print Name

Date Signed _____

WREMS



WESTERN REGIONAL
EMERGENCY MEDICAL SYSTEM, INC.

c/o Erie County Medical Center
462 Grider Street
Buffalo, NY 14215-3098
(716) 898-5072
Fax: (716) 898-5198

Anaphylaxis

Note:

**Request Advanced Life Support if available.
Do not delay transport to the hospital.**

For patients previously prescribed an Epinephrine Auto-Injector, between one (1) and sixty-five (65) years of age, who have a prior history of an allergic reaction to a particular substance, have been exposed to the same substance and are experiencing a significant reaction, such as respiratory distress, shock, or severe hives.

- I. Assure that the patient's airway is open and that breathing and circulation are adequate. Suction as necessary.
-

Note:

In pediatric patients, maintain a calm approach to both parent and child. Allow the child to assume and maintain a position of comfort or to be held by the parent preferably in an upright position.

- II. Administer oxygen.
-

Note:

Avoid agitation of the pediatric patient. Administration of oxygen, preferably humidified, is best accomplished by allowing the parent to hold the face mask, if tolerated about 6 – 8 inches from the child's face.

Anaphylaxis Protocol – Continued

- III. If patient presents with **serious signs/symptoms** (severe respiratory distress, or exhibits signs/symptoms of shock), and has a history of allergic reaction:
- A. **Use the patient's prescribed epinephrine auto-injector if available.**
 - B. If the patient's auto-injector is not available, **administer epinephrine using an epinephrine auto-injector.**
 - 1. Adult Dose: 0.3 mg
 - 2. Pediatric Dose: 0.15 mg
 - a. If patient is over 8 year old, and weighs more than 66 lbs (30 kg), may use adult epinephrine auto-injector
- IV. Begin immediate transport and contact Medical Control.
- V. Contact Medical Control for authorization for a second administration of the epinephrine auto-injector, if needed.
- VI. **If the patient does not have a history of allergies/allergic reactions, begin transport immediately and contact Medical Control for directions.**

Note:

In the event that you are unable to make contact with medical control (radio failure, no communications) and the patient is under 35 years of age, you may administer the epinephrine auto-injector if indicated. The incident should be reported to Medical Control or your agency Medical Director or the physician Emergency Health Care Provider as soon as possible.

- VII. **If shock is present, refer immediately to the New York State BLS Shock Protocol.**
- VIII. **If cardiac arrest occurs, perform CPR according to AHA/ARC standards and refer to the New York State BLS Cardiac Arrest Protocol.**
- IX. Obtain and record the patient's initial vital signs, repeat en route as often as the situation indicates. Be alert for changes in the level of consciousness.
- X. Record all patient care information, including medical history and all treatment provided, on a Prehospital Care Report.

WREMS



WESTERN REGIONAL
EMERGENCY MEDICAL SYSTEM, INC.

c/o Erie County Medical Center
462 Grider Street
Buffalo, NY 14215-3098
(716) 898-5072
Fax: (716) 898-5198

Asthma

For patients previously diagnosed with Asthma between one (1) and sixty-five (65) years of age, who are experiencing difficulty breathing with audible wheezing.

Note:

**Request Advanced Life Support if available.
Do not delay transport to the hospital.**

- I. Assess the airway
 - II. Administer oxygen
 - III. Monitor breathing
-

Note:

If patient exhibits signs of imminent respiratory failure, refer to the New York State BLS Adult Respiratory Arrest or the Pediatric Respiratory Arrest or Imminent Respiratory Arrest Protocols.

- IV. Place the patient in a position of comfort.
- V. Access vital signs, especially respiratory rate, and for the following prior to administration of the first nebulized treatment:
 - Audible wheezes
 - Retractions
 - Other accessory muscle usage.

Note:

For patients with a history of angina, myocardial infarction, arrhythmia, or congestive heart failure, Medical Control must be contacted prior to initiating step VI.

- VI. Administer Albuterol Sulfate 0.083%, one (1) unit dose or 3cc via nebulizer at a flow rate of 8 – 10 lpm. Do not delay transport to complete medication administration.
- VII. Begin transport and call Medical Control.
- VIII. If symptoms persist, treatment may be repeated once for a total of two (2) doses.
- IX. Upon completion of patient treatment or prior to transfer of patient care to an ALS provider or a Receiving Hospital, reassess the patient.

Note:

Medical Control must be contacted for any patient refusing medical assistance or transport.

NEW YORK STATE DEPARTMENT OF HEALTH BUREAU OF EMERGENCY MEDICAL SERVICES

TRAINING PROGRAM OUTLINE FOR UNLICENSED OR UNCERTIFIED PERSONNEL TO ADMINISTER EPINEPHRINE BY AUTO-INJECTOR IN LIFE-THREATENING SITUATIONS

- PURPOSE:** To provide unlicensed or uncertified personnel with the basic knowledge and skills to administer epinephrine by auto-injector in a life-threatening situation. (For the purpose of this outline, "unlicensed or uncertified personnel" is defined as individuals who do not have a license or certification that allows them to administer prescribed medications.)
- INSTRUCTOR:** The Physician (Emergency Health Care Provider) or his/her designee should teach this program.
- OBJECTIVES:** Upon completion of the training the participants will be able to demonstrate the following competencies:
1. identify common causes of allergic emergencies;
 2. identify the signs and symptoms of a severe allergic reaction (anaphylaxis), and how they differ from other medical conditions;
 3. describe how to quickly access the Emergency Medical Services System (call 911 or appropriate emergency number);
 4. list the steps for administering epinephrine by an auto-injector;
 5. describe the methods for safely storing and handling epinephrine and appropriately disposing of the auto-injector after use;
 6. list the steps for providing for on-going care of the patient until EMS arrives;
 7. understand the state regulations that allow an individual to possess and use an epinephrine auto-injector in a life-threatening situation.

What are the most common causes of an allergic reaction?

A wide variety of different substances can cause allergic reactions in people. Some of the most common causes include:

- ✓ Venom from insect bites and stings, especially those of bees, wasps, hornets, and yellow jackets;
- ✓ Foods, including nuts, shellfish/crustaceans, peanuts, milk, eggs, chocolate, etc;
- ✓ Plants, including contact with poison ivy, poison oak, and pollen from ragweed and grasses;
- ✓ Medications, including penicillin and other antibiotics, aspirin, seizure medications, muscle relaxants, etc;
- ✓ Other causes include dust, latex, glue, soaps, make-up, etc.

What are the signs and symptoms of an allergic reaction?

Allergic reactions can range from the watery eyes and runny nose of hay fever to severe breathing problems (respiratory distress) and low blood pressure (hypoperfusion).

Physical findings that may indicate an allergic reaction include any of those listed below.

Generalized symptoms: Itchy, watery eyes, headache, or runny nose.

Skin: Swelling of the face, lips, tongue, neck, or hands. Itching, hives or red skin (flushing).

Breathing Problems: Cough, rapid breathing, difficulty breathing, noisy breathing, change in voice or loss of voice (hoarseness), high pitched noise during inhalation (stridor), or wheezing. **Serious breathing problems (severe respiratory distress) is a sign that the individual is having a severe allergic reaction (Anaphylaxis).**

Heart (Circulation) Problems: Increased heart rate, decreased blood pressure, or signs of cool, clammy skin (hypoperfusion).

Mental Status: Confusion, fainting or loss of consciousness.

How can I tell it is a "severe allergic reaction" that needs the epinephrine auto-injector?

You may need to administer epinephrine with the auto-injector if a patient, who has a history of allergies/allergic reactions, has come in contact with a substance(s) that causes the allergic reaction. If the patient has been prescribed an epinephrine auto-injector and is having a very hard time breathing (**severe respiratory distress**), you will need to administer the epinephrine. For other cases (i.e., someone who has not been prescribed an epinephrine auto-injector) you should consult with the physician (Emergency Health Care Provider).

Does the epinephrine come in more than one size or dose?

Yes, the epinephrine auto-injector comes in both an adult dose (0.3 mg) and a pediatric dose (0.15 mg). Generally the adult dose is for individuals who weigh 66 lbs. or more and the pediatric dose is for individuals who weigh 33 -66 lbs. You must consult with your physician (Emergency Health Care Provider) about which auto-injector is most appropriate to carry and use in your situation.

If someone has a severe allergic reaction what should I do first?

First have someone **CALL 911** or your local emergency number and request an ambulance! It is very important to activate your local Emergency Medical Services (EMS) Agency right away. The patient with a severe allergic reaction may require additional Advance Life Support (ALS) medications or other emergency life-saving procedures. All patients who receive the epinephrine must have immediate follow-up evaluation by a physician.

How do I administer the epinephrine with the auto-injector?

Sit the patient down and try to calm and reassure him/her. If the patient is confused, disoriented, or unconscious (altered mental state) and signs of a weak, rapid pulse, cool clammy skin (hypoperfusion), lay him/her down and slightly elevate his/her feet. If oxygen is available, and someone is trained in its use, administer a high concentration of oxygen. If the patient is having a hard time breathing administer the epinephrine as follows:

Step One Remove the safety cap from the auto-injector. Check to see if the fluid is clear and colorless. **Never put your fingers over the black tip when removing the safety cap or after the safety cap has been removed!**

- Step Two** Place the tip of the injector against the patient's bare outer thigh. (Halfway between their waist and the knee)
- Step Three** With a quick motion, push the auto-injector firmly against the thigh until the spring-loaded needle is activated. Hold the auto-injector in place for ten (10) seconds.
- Step Four** Remove the auto-injector from the thigh and record the time of the injection.
- Step Five** Carefully re-insert the unit (without replacing the safety cap) -NEEDLE FIRST- into the carrying tube and re-cap the carrying tube. **Never put your fingers over the black tip after the safety cap has been removed!** Give the tube to the ambulance crew so they know exactly what you have given and can appropriately dispose of it at the hospital. Also provide them with the exact time that you administered the epinephrine.
- Step Six** Watch the patient carefully, and keep them calm. Note if the patient gets any better or worse. Be prepared to give CPR if needed.

What will the patient feel when I use the auto-injector The injection itself is relatively painless and the patient may not feel the medication being injected. Soon after the injection the patient should begin to feel the beneficial effects of the drug. The most common changes the patient may feel are a more rapid heartbeat and a slight nervousness. The patient may experience palpitations, sweating, dizziness and a headache.

What information do I need to give EMS? If the epinephrine auto-injector is used, make sure the following information is accurately and concisely conveyed to the EMS Provider and physician:

- ✓ The substance (allergen) the patient was exposed to
- ✓ How long ago the exposure occurred
- ✓ The signs and symptoms the patient experienced (difficulty breathing, tightness in the throat or chest, any swelling, etc.) before the epinephrine was administered
- ✓ The time and dose of the epinephrine administered

- ✓ Did you notice any change(s) in the patient after the epinephrine was administered
- ✓ Other specific information about the patient such as name, age, guardian, physician, medical history, etc.

Where should I keep the epinephrine auto-injector?

You will need to keep the epinephrine auto-injector where you can have quick and easy access to it in an emergency. Keep it away from children. Keep it in the plastic carrying tube it comes in.

It is important to remember that the epinephrine needs to be kept at room temperature. It should not be refrigerated, nor should you allow it to be exposed to extreme heat, such as the glove compartment or trunk of a car during the summer. Do not expose the epinephrine auto-injector to direct sunlight; light and heat can cause epinephrine to degrade, turning brown.

Does the Epinephrine Auto-Injector have an expiration date or need to be replaced?

As with any medication, the epinephrine auto-injector will have an expiration date, which is printed directly on the unit. It is important to periodically check the expiration date and replace the unit before it expires. When checking the expiration date also check to make sure the fluid is clear and colorless. Replace the unit if the fluid is discolored.

Can I be injured by the auto-injector unit?

The auto-injector unit is generally very safe and easy to use. It is important to remember that the unit does have a sharp needle in it. Do not remove the safety cap until you are ready to use the auto-injector. **Never put your fingers over the black tip when removing the safety cap or after the safety cap has been removed.** Do not replace the safety cap once it has been removed. After use carefully re-insert the unit -NEEDLE FIRST - into the carrying tube, then re-cap the carrying tube.

Who can use an epinephrine auto-injector?

For many years physicians have prescribe the epinephrine auto-injector to patients with known allergies. Many people carry the unit with them. Recently Governor Pataki signed into law a bill that authorizes the possession and use of an epinephrine auto-injector by certain individuals in children's overnight, summer day or traveling summer day camps and others.

This allows Camp Staff to administer epinephrine to patients with a history of allergies/allergic reactions who has a severe allergic reaction even if the patient doesn't have his/her prescribed auto-injector with them.

To be authorized to possess and use the epinephrine auto-injector an individual or organization (as noted above) must have a written collaborative agreement with a physician "emergency health care provider" which is filed with the local Regional Emergency Medical Services Council and the Department of Health. All participating individuals must complete this or an equivalent training program.

How is the epinephrine auto-injector obtained?

The Epinephrine Auto-Injector is available at most pharmacies. To purchase the auto-injector you will need a prescription from your participating physician (Emergency Health Care Provider).

For more information:

For more information on the requirements contact the Bureau of Emergency Medical Services:

**New York State Department of Health
Bureau of Emergency Medical Services
433 River Street, Suite 303
Troy, New York 12180
(518) 402-0996**



Web Resources

Food Allergy Resources <http://www.foodallergy.org>

American Academy of Pediatrics <http://www.aap.org>

American College of Allergy, Asthma & Immunology <http://allergy.mcg.edu>

Center for Healthcare Information <http://www.cmrg.com>

Asthma & Allergy Foundation <http://www.aafaflorida.org>

New York State Department of Health <http://www.health.state.ny.us>