

Educational Supplement

to the

Connecticut Statewide Emergency Medical Services Protocols Epinephrine Auto-Injector by Emergency Medical Responders

CT EMS Advisory Board
Education & Training Committee

Protocols Version: v2023.V1
Last Reviewed: 2024-January

Purpose: To provide guidance for EMS-Instructors, Training Officers, and Preceptors regarding items in the CT EMS Protocols and Scope of Practice that:

- Require specific additional training and/or approval under the oversight of a service's Sponsor Hospital and Medical Director,
- Represent recent significant changes to the protocols or scope of practice, or
- Would be benefit from consistency in the education and training of providers statewide.

Goal

The goal of this education program is to provide emergency medical responders with the knowledge, skills and attitude necessary to provide timely and adequate medical care to an adult or child with signs and symptoms of anaphylaxis (severe allergic reaction) to include the administration of epinephrine by prefilled commercially prepared autoinjector such as EpiPen®.

Limitation: *Credentialing to perform any skill as an EMS provider is overseen by the service's Sponsor Hospital Medical Director and additional training or other requirements may exist at their discretion. This document serves only as a guide in the development of education and training programs and does not replace appropriate medical oversight.*

Epinephrine Auto-Injector - EMR

CME Approval: CT-F4-198

Sponsor Hospital Approval: EMR

Last Reviewed: 2023-December

Service MIC Authorization: N/A

Cognitive Objectives:

- EMR will know the signs/symptoms of an allergic reaction
- Single body system reaction
- Localized inflammation/itching
- Runny nose, sneezing, watery eyes
- EMR will know the signs/symptoms of an anaphylactic reaction
- Two or more body systems
- Respiratory (angioedema, stridor, wheezing)
- Cardiovascular (hypo/hypertension, tachycardia)
- Integumentary (itching, flushing, hives, swelling)
- GI (nausea, vomiting, diarrhea)
- EMR will review the properties of epinephrine
- Actions,
- Side effects
- Indications and contraindications
- EMR will learn the adult and pediatric dosing of epinephrine auto-injectors, including potential weight recommendations by manufacturer.
- EMR will review the State of CT Allergic Reaction/Anaphylaxis protocols (2.3A & 2.3P)
- EMR will learn the proper location to administer an “IM” injection of epi.
- EMR will review the “Rights” of medication administration
- EMR will review proper sharps disposal procedures
- EMR will review proper documentation of administering “IM” epi (in both the narrative and interventions sections of a patient care report)
- EMR will learn how to report and prevent medication errors

Psychomotor Objectives:

- EMR will demonstrate an effective assessment of a patient who may be experiencing an allergic reaction or anaphylaxis. This should include vitals, lung sounds, full SAMPLE history.
- EMR will demonstrate proper use of PPE and aseptic technique when administering it epinephrine.
- EMR will demonstrate safe handling of auto-injector
- EMR will correctly administer epi to the “sample” patient
- EMR will properly dispose of sharps
- EMR will voice the correct locations for documentation of epi administration in the PCR
- EMR will voice when it is time to re-administer epi.

Affective Objectives:

- Given a scenario, the EMR will be able to differentiate between an allergic reaction and anaphylaxis, and justify why/why not epi should be administered.
- Given a scenario the EMR will explain why or why not a second dose of epi should/should not be administered.

- Given a scenario the EMR will explain why a medication error was made and detail how to prevent it in the future.
- Given a scenario the EMR will explain why or why not a second dose of epi should/should not be administered.

Instructor Notes:

- Each EMR should complete the final written assessment (as provided by State Education & Training). This may be reviewed in class and copies retained in agency training files.
- Ensure that EMRs understand that Medical Control must be contacted prior to re-dosing the patient
- Ample time should be provided to allow students to practice the skills required to demonstrate competency. Once they have attained a functional ability, each EMR should demonstrate the skill of epinephrine auto-injector administration before a credentialed EMS instructor who will document the validation using the provided State Education and Training skill sheet. More than one attempt is permitted.

Related Protocols:

- Current Connecticut EMS Protocol #2.3A and P

Recommended CQI Performance Metrics:

- Successful completion of quiz developed by State Education and Training
- Successful completion of skills associated with administering an auto-injector
- Yearly training, including skill practice
- QA of every administration of IM auto-injector epinephrine

Resources:

- Current Connecticut EMS Protocol #2.3A and P
- Epinephrine Auto-Injector Trainer (similar to brand used at EMS agency)
- CT OEMS Skill Sheet
- CT OEMS Review Quiz and Answer Key (Emails OEMS to request quiz)
- Training certificates

References:

- **2009 National EMS Education Standards** (Note that the EMT standards are used)

Pharmacology: The EMT will apply a fundamental knowledge of the medications that the EMT pay assist/administer the patient during an emergency.

Emergency Medications: The EMT will have a fundamental depth and simple understanding of knowledge, within the scope of practice of an EMT, of the names, actions, indications, contraindications, complications, routes of administration, side effects and interactions and dosages for the medications administered.

Medication Administration: The EMT will have a fundamental depth and foundational understanding of knowledge, within the scope of practice of an EMT, how to administer medication to a patient.

- [Statewide EMS Protocols \(ct.gov\)](http://www.ct.gov)