

# **Prehospital Care Bundles**

The MLREMS Prehospital Care Bundles have been created to provide a simple framework to help EMS providers identify the most critical elements when caring for a patient. These bundles do not replace protocol, but are designed to assist quality assurance and performance evaluations as we work collectively to optimize the delivery of prehospital medicine. As the science and evidence changes, so will these care bundles.

The New York State Collaborative Protocols and the MLREMS Care Bundles are intended to improve patient care by prehospital providers. They reflect current evidence and the consensus of content matter experts. The Collaborative Protocols and the MLREMS Care Bundles are intended to provide principles and direction for the management of patients that are sufficiently flexible to accommodate the complexity of care in the prehospital environment. No Protocol or Care Bundle can be written to cover every situation that a provider may encounter, nor are they substitutes for the judgement and experience of the provider. Providers are expected to utilize their best clinical judgement to deliver care and procedures according to what is reasonable and prudent for specific situations. However, it is expected that any deviations from protocol shall be documented along with the rationale for such deviation.

NO PROTOCOL OR CARE BUNDLE IS A SUBSTITUTE FOR SOUND CLINICAL JUDGEMENT.



# **Anaphylaxis**Care Bundle

# **Anaphylaxis**

Metric	Goal
Early Identification	Within 1 minute of patient contact
Epinephrine Administration	IM administration of the appropriate adult or pediatric
	dose of epinephrine 1mg/1ml concentration within 1
	minute of identification
Nebulized Bronchodilator Administration	Administered if wheezing/respiratory involvement
Large Bore Vascular Access	2 Large Bore (14 or 16 gauge preferred) IV's
Antihistamine Administration	Per protocol, as soon as feasible after epinephrine
Glucocorticoid Administration	Per protocol, as soon as feasible after epinephrine
Fluid Resuscitation	Fluid resuscitation given to maintain MAP >65 mmHg

# Theory/Evidence

## Early Identification

 Early identification, based on history and physical examination, of patients with anaphylaxis is critical to facilitate life-saving treatments.

#### **Epinephrine Administration**

Epinephrine is the single most important intervention in treating anaphylaxis. In the setting of anaphylaxis there is no contraindication to administering the appropriate adult or pediatric dose of epinephrine 1 mg/1 ml concentration intramuscularly per protocol. Epinephrine counteracts the vasodilation and bronchoconstriction associated with anaphylactic shock, and reduces mortality.

#### Nebulized Bronchodilator Administration

• If wheezing, the bronchodilatory properties of albuterol and anticholinergic effects of ipratropium reduce bronchoconstriction and inflammatory processes present in anaphylaxis.

#### Large Bore Vascular Access

 Establishing large bore vascular access in a patient with anaphylaxis allows for efficient and rapid fluid resuscitation.

#### Antihistamine Administration

 Reduces the intensity of anaphylactic symptoms by reversing the effects of histamine on capillaries and should be administered after epinephrine.

### Glucocorticoid Administration (Dexamethasone)

May reduce the recurrence of secondary anaphylactic reactions in patients with anaphylaxis and should be administered after epinephrine.

#### Fluid Resuscitation

 Early and aggressive fluid resuscitation in patients with suspected distributive shock due to anaphylaxis reduces morbidity and mortality.