

# Memo

**To:** EMS Agencies, Medical Directors, Program Agencies, Emergency Department Directors,  
Regional EMS Councils

**From:** WREMAC

**Date:** 7/27/2010

**Re:** Medication Shortages

---

As many may know, there are multiple medications facing current national shortages and other expected to be in short supply over the next several weeks, if not months. Not all these medications are used by EMS in our region. However, for the medications that do affect providers in the Western Region, we have listed alternatives below. These alternatives are based on available medications that are currently in our protocols.

Although these alternatives may not be considered ideal, they minimize protocol changes, have similar pharmacological effects as the missing medication and take into account patient safety and potential medication errors.

It is expected that other medications will likely have availability issues for the foreseeable future, both as a result of the current shortage and other market forces. If any agency finds difficulty stocking other medications in the future, please contact your Program Agency or the WREMAC so that we may address the issue.

## Medication Substitutions for WREMAC ALS Protocols

### Adult Protocols

1. Lack of D50/25: D10W bolus, Glucagon 1 mg IM, or oral glucose (awake patients only for oral glucose) in that order for the following protocols:

Altered Mental Status

2. Lack of Epi 1:10,000: Vasopressin should be substituted in the following protocols:

Asystole

Pulseless Electrical Activity (PEA)

VF/VT

Remove from following protocol:

Suspected Allergic Reaction

3. Lack of Epi 1:1000: EpiPen auto injector should be substituted in the following protocols:

Respiratory Signs and Symptoms

Suspected Allergic Reaction

4. Lack of Lasix: There will be no replacement for Lasix. Remove from following protocols:

Respiratory Signs and Symptoms

5. Lack of Lidocaine: Amiodarone is first line agent for all protocols. Remove Lidocaine as Medical Control Treatment Option from the following protocols:

Tachycardia

VF/VT

## Pediatric Protocols

1. Lack of Epi 1:10,000: Dilute Epi 1:1000 1 ml vial in 9 ml of Normal Saline (waste 1 ml from 10 ml vial of NS and then add 1 ml of Epi 1:1000) for the following protocols:

Asystole

Pulseless Electrical Activity (PEA)

VF/VT

Remove from following protocol:

Suspected Allergic Reaction

2. Lack of Epi 1:1000: EpiPen Jr auto injector should be substituted for patients 1 year or older (contact Medical Control for under 1 year of age) in the following protocols:

Respiratory Signs and Symptoms

Suspected Allergic Reaction

3. Lack of D50/25: D10W bolus, Glucagon 1 mg IM, or oral glucose (awake patients only for oral glucose) in that order for the following protocols:

Altered Mental Status

4. Lack of Lidocaine: Amiodarone is first line agent for all protocols. Remove Lidocaine as Medical Control Treatment Option from the following protocols:

Tachycardia

VF/VT

Note: Unlike in adults, Vasopressin has not been approved for pediatric ACLS. This requires dilution of Epinephrine. By limiting the dilution of Epinephrine to pediatric patients only, the hope is to limit the potential shortage of Epi 1:1000 for the foreseeable future.