



DATE: May 25, 2017

TO: Region XI EMS Prehospital Providers; Region XI EMS Participating Hospitals

FROM: REGION XI EMS MEDICAL DIRECTORS

SUBJECT: EPINEPHRINE SHORTAGE - REGION XI EMS SYSTEM MODIFICATION

There is currently a national shortage of 0.1 mg/mL (1:10,000) epinephrine. This shortage is currently affecting both hospitals and EMS providers within Region XI. In order to continue providing lifesaving treatment to our patients, it may be necessary to substitute diluted 1 mg/mL (1:1000) epinephrine for 0.1 mg/mL (1:10,000) epinephrine. The following SMO's contain 0.1 mg/mL (1:10,000) epinephrine and will be impacted by this Region XI EMS System modification:

Ventricular Fibrillation & Pulseless Ventricular Tachycardia - ALS B.3

Pulseless Electrical Activity/Asystole - ALS B.4

Allergic Reaction and/or Anaphylaxis - ALS C.3

Ventricular Fibrillation & Pulseless Ventricular Tachycardia-Pediatric - ALS H.4

Pulseless Electrical Activity/Asystole-Pediatric - ALS H.5

Allergic Reaction and/or Anaphylaxis-Pediatric - ALS H.11

In addition, the Region XI EMS Medical Directors Consortium is requesting that during the treatment of cardiac arrest, epinephrine is spaced out **EVERY 5 MINUTES** instead of every 3-5 minutes. If return of spontaneous circulation is not achieved after 20 minutes of resuscitation using incident command for cardiac arrest, online medical control should be contacted to discuss further management or, if appropriate, termination of resuscitation.

Note: 1 mg/mL (1:1000) epinephrine **MUST BE DILUTED** prior to administration. Under no circumstance will undiluted 1 mg/mL (1:1000) be administered intravenously to patients.

Use the either of the following techniques to dilute 1mg/mL (1:1000) epinephrine:

- 1. Draw up 1 mL of 1 mg/mL (1:1000) epinephrine into a 10 mL syringe using a 23 gauge needle. Draw up 9 mL from a bag of normal saline (NS). Shake the syringe. The syringe now contains 0.1 mg/mL (1:10,000) epinephrine.
- 2. Obtain a pre-filled 10 mL NS flush. Place a 23 gauge needle on the NS flush and discard 1 mL from the syringe. Draw up 1 mL of 1 mg/mL (1:1000) epinephrine into the syringe. Shake the syringe. The syringe now contains 0.1 mg/mL (1:10,000) epinephrine.

These modifications to Region XI EMS care will be in effect until the resolution of the epinephrine shortage. Hospitals experiencing an epinephrine shortage may replace 0.1 mg/mL (1:10,000) epinephrine with 1 mg/mL (1:1000) epinephrine to EMS providers.

Should you have any questions regarding this information, please contact your Resource Hospital EMS Coordinator.

Respectfully,

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Chair, Region XI EMS Medical Directors Consortium

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