



CLAYTON CHAU, MD PhD  
DIRECTOR/COUNTY HEALTH  
OFFICER

MINDY WINTERSWYK, PT, DPT, PCS  
INTERIM ASSISTANT AGENCY  
DIRECTOR

STEVE THRONSON  
DEPUTY AGENCY DIRECTOR  
MEDICAL HEALTH SERVICES

TAMMI McCONNELL  
DIVISION MANAGER  
EMERGENCY MEDICAL SERVICES

405 W. 5<sup>th</sup> STREET, SUITE 301-A  
SANTA ANA, CA 92701

PHONE: 714-834-2791


FAX: 714-834-3125

Email: [TMcConnell@ochca.com](mailto:TMcConnell@ochca.com)

**MEDICAL HEALTH SERVICES  
EMERGENCY MEDICAL SERVICES**

**DATE:** December 20, 2021

**TO:** ORANGE COUNTY ADVANCED LIFE SUPPORT PROVIDERS

**FROM:** CARL H. SCHULTZ, MD   
OCEMS MEDICAL DIRECTOR

**SUBJECT:** SHORTAGE OF EPINEPHRINE PRE-FILLED SYRINGES

Orange County advanced life support providers are now having increasing difficulty purchasing epinephrine 0.1 mg/mL pre-filled syringes commonly used for cardiac arrest and patients with hypotension after further dilution for IV push-dose epinephrine. Currently available concentration is the 1 mg/mL vial.

During this time of epinephrine pre-filled syringe drug shortage, OCEMS authorized the following modifications of current policies and procedures until supplies return to normal:

For pediatric patients in cardiac arrest, dilute the contents of an epinephrine 1 mg/mL vial with a syringe containing 9 mL sterile normal saline. Using this diluted solution, administer as 1 mg/10 mL epinephrine per usual standing or Base Hospital order using weight-based dosing schedule.

For adults, providers can administer the 1 mg/mL solution IV push. After 3 rounds of IV epinephrine, paramedics can consider either transporting the patient or requesting pronouncement by the Base Hospital.

Double dilution of the 1 mg/mL epinephrine vial to provide push dose epinephrine for hypotensive patients is **NOT** authorized.

OCEMS authorizes providers who currently possess 0.1 mg/mL (1 mg/10 mL) epinephrine syringes that are about to expire to continue use of these syringes for up to 6 months past their expiration date. If such syringes are used, patients or their family/representatives and OCEMS must be notified that these expired medications were used.

CS:em#4190