



UTSW/Parkland BioTel EMS ALERT

March 14, 2022

EMS ALERT 22-001

Shortage of “Cardiac” Epinephrine Prefilled Syringes (0.1 mg/mL)

Purpose: To notify BioTel EMS Agencies and Providers about the nationwide shortage of “cardiac” epinephrine 0.1 mg/mL pre-filled syringes and to provide a temporary workaround for epinephrine administration **during cardiac arrest**.

Background: National and international supply-chain issues have created severe shortages of prefilled syringes for several lifesaving medications commonly used by EMS. These shortages include “cardiac” epinephrine (0.1 mg/mL), previously known as epinephrine “1:10,000”.

Policy, effective immediately and until further notice:

1. The Medical Director shall issue to all **UTSW/Parkland BioTel EMS AGENCIES** a letter temporarily authorizing use of existing “cardiac” epinephrine prefilled syringe supplies for up to 6 months past their original expiration date:
 - a. This is consistent with recent, official FDA & DSHS advisories authorizing such extensions.
 - b. The extension will be renewed and updated, as needed, pending a long-term solution.
2. The Medical Director hereby authorizes for **UTSW/Parkland BioTel EMS PROVIDERS** the following temporary workaround for each dose used during **cardiac arrest resuscitation ONLY WHEN** “cardiac” epinephrine (0.1 mg/mL) prefilled syringes are unavailable:
 - a. High-quality CPR should continue without interruption during medication preparation
 - b. Draw up 1 mL (1 mg) of epinephrine (1 mg/mL) ([previously known as epi 1:1000](#)):
 - i. **Preferred:** use the entire contents from a single-dose, 1-mL (1 mg) vial or ampule
 - ii. OR Alternate: draw up 1 mL (1 mg) from a multi-dose vial:
 - a. Use extreme caution to draw up *exactly* 1 mL
 - b. “[FDA best practices](#)” stipulate that the vial must be discarded upon patient care transfer to hospital staff – do NOT re-use the vial for another patient
 - c. Dilute the 1 mL (1 mg) of epinephrine (1 mg/mL) with 9 mL normal saline in a 10-mL syringe, then follow appropriate adult or pediatric dosing below:
 - i. ADULTS (≥14 years of age): Administer 10 mL (1 mg) IV/IO, as per BioTel Clinical Practice Guidelines (CPGs)
 - ii. PEDIATRIC (<14 years of age): Administer 0.1 mL/kg (0.01 mg/kg) IV/IO, as per BioTel CPG
 - a. Providers are highly encouraged to use the BioTel PEDI-Guide which is NOT affected by this alteration once the dilution has been performed.

➤ **UTSW/Parkland BioTel EMS Providers may contact BioTel or the [Medical Direction Team](#) at any time with questions or concerns about this EMS Alert**