



# UTSW/Parkland BioTel EMS ALERT

August 2, 2017

## EMS ALERT 17-002

### 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 include: “cardiac” epinephrine (0.1 mg/mL) (previously known as epinephrine “1:10,000”), 50% dextrose, sodium bicarbonate, atropine, and others. In some cases, EMS agencies have already run out of these preparations. A long-term solution is not immediately forthcoming. EMS agencies must now adapt their protocols, clinical guidelines and procedures accordingly.

### 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 AND ONLY** when “cardiac” epinephrine (0.1 mg/mL) prefilled syringes are unavailable:
  - a. 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:
      1. Use extreme caution to draw up exactly 1 mL
      2. “[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
  - b. Dilute the 1 mL (1 mg) of epinephrine (1 mg/mL) with 9 mL normal saline in a 10-mL syringe, and then proceed either to Step c or to Step d:
    - i. High-quality CPR should continue without interruption during drug preparation
  - c. ADULTS at least 14 years of age in cardiac arrest:
    - i. Administer 10 mL (1 mg) IV/IO, as per BioTel Guidelines for Therapy
  - d. PEDIATRIC patients less than 14 years of age in cardiac arrest:
    - i. Administer 0.1 mL/kg (0.01 mg/kg) IV/IO, as per BioTel Guidelines for Therapy

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