

## **Denver Metro EMS Medical Directors Medication Expiration Guidelines**

Emergency Medical Services (EMS) has been greatly affected by nationwide medication shortages<sup>1</sup>. Several critical or potentially life-saving medications utilized by EMS have been unavailable or in very short supply, creating a potentially dangerous environment for patients. Drug shortages have been associated with delays in treatment, increased medication errors, and increased cost. The International Association of Fire Chiefs has issued a position statement detailing the impact of nationwide drug shortages, and calling on EMS leadership to "examine other medically appropriate or approved solutions" <sup>2</sup>.

Ideally, an expired medication would never be utilized for patient care. However, several medications for which there are no readily available substitutions are known to have potency long after their expiration date <sup>3</sup>. Multiple EMS systems have adopted procedures for use of medications in very short supply in light of this information <sup>4, 5</sup>.

In response to this National crisis, the Denver Metro EMS Medical Directors are issuing the following guidelines:

- Approved medications required for treatment of potentially life threatening conditions for which there is no reasonable substitution may be used after their posted expiration date with the following restrictions:
  - Individual medications in short supply should be approved by EMS Medical Director before being used after the expiration date. EMS Agency and Medical Director will maintain a list of medications approved for use after the expiration date.
  - o Expired medications will be used only after supply of non-expired medications has been exhausted.
  - o Expired medications will be stored and maintained according to the packaging instructions; especially with regards to temperature and light exposure.
  - o As with any medication (expired or not expired), medications will be visually inspected for the presence of particulate matter and for normal coloration of the solution prior to administration.
- As part of an individual EMS agency's PI Program the agency will review any expired medication
  use and should keep a record of use of all expired medications used in the field.

## References

- 1. Current drug shortages. Retrieved on 9/30/2013 from http://www.fda.gov/Drugs/DrugSafety/DrugShortages/ucm050792.htm
- 2. Lyon, Taylor, Porter, Prasanna, Hussain. Stability profiles of drug products extended beyond labeled expiration dates. Journal of Pharmaceutical Sciences, Vol 95, No.7, July 2006. 1549-1560.
- 3. Orange County California EMS Policy regarding medication shortage. Retrieved on 9/30/2013 from http://www.astho.org/Programs/Preparedness/Coping-With-Drug-Shortages/Orange-County-California-Drug-Shortage-Advisory/
- 4. The position statement regarding national drug shortages position paper by the International association of Fire Chiefs (IAFC.org). Retrieved on 9/30/2013 from http://www.iafc.org/files/1ASSOC/Position\_NationalDrugShortage.pdf
- 5. Utah EMS Policy regarding medication shortage. Retrieved on 9/30/2013 from http://health.utah.gov/ems/rulereg/medication\_shortage\_policy.pdf