



California
Department of
Health Services

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Department of Health Services



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Governor

February 1, 2005

AFL 05-02

TO: General Acute Care Hospitals

SUBJECT: Storage and Use of Emergency Medications

BACKGROUND: The Department of Health Services, Licensing and Certification program is issuing this letter to address concerns pertaining to the provision of emergency medications. The concerns identified have been noted throughout the state and have resulted in both licensing noncompliance determinations and Federal Immediate Jeopardy declarations.

This letter is intended to provide guidance for the establishment, storage and use of emergency medications. The recommendations are based on California Code of Regulations, Title 22, Section 70263(f) (1-3) and standards of practice such as the Institute for Safe Medication Practice (ISMP) and American Society for Health-System Pharmacists (ASHP). The storage of emergency medications must be in a manner that provides for comprehensive and safe treatment of emergent clinical situations in an expeditious manner consistent with standards of clinical practice. We ask that you consider these recommendations to evaluate provision of emergency medications stored and utilized in clinical service areas.

STORAGE OF EMERGENCY MEDICATIONS

- Ensure approved policies and procedures are developed establishing the content of emergency supplies, procedures for use, restocking and sealing the emergency supply. The policies and procedures should be current, based on clinical standards of practice and periodically reviewed.
- Storage of emergency medications should be secured in a manner that prevents tampering or unauthorized access.
- The type and quantity of emergency medications should be sufficient to manage different patient types (neonatal, pediatric, adult), weights and clinical conditions (i.e. malignant hyperthermia, cardiac or pulmonary resuscitation)

- If clinical guidelines are used to facilitate medication and dosage selection (e.g. Pediatric Advance Life Support, Broselow ®, Advanced Cardiac Life Support, etc.) the medications contained in each cart must match the clinical guidelines.
- If clinical guidelines are in an electronic format, a backup system needs to be in place in case of power failure
- The emergency medications contained in each cart should contain standard concentrations to prevent confusion in dosage calculations.
- The emergency medications contained in each cart should be organized, such that medications are easily recognizable and accessible.
- A content list must be posted on the outside of the portable container containing emergency medications and equipment. A content list attached to a medication tray that is sealed and placed inside a movable cart doesn't meet the requirements of regulation
- The content list must accurately and comprehensively reflect all medications in the cart (i.e. vials of normal saline for injection, tubes of lidocaine jelly, bottles of povidone-iodine solution, large and small volume parenteral solutions, etc).
- The expiration date of the first medication(s) to expire must be posted on the outside of the movable cart.
- Emergency medications must be checked by a pharmacist before the cart is sealed.
- The emergency medications are periodically inspected by a pharmacist and these inspections occur no less frequently than every 30 days.
- Emergency medications should be stored in those clinical areas where an emergency might be anticipated, including outpatient areas of the hospital.

USE OF EMERGENCY MEDICATIONS

- All personnel who might utilize emergency medication carts should be familiar with the contents and how to use the medications and supplies.

- Personnel should be properly qualified and competent to prepare and administer emergency medications. Properly qualified may be met through completion of certification programs such as Pediatric Advance Life Support (PALS), Advance Cardiac Life Support (ACLS) or Neonatal Resuscitation Program (NRP). Competency may also be demonstrated by successful participation in mock “codes” that is specific to the first responders expected performance.
- Broselow® system is a commercial product designed for management of pediatric emergencies. The Broselow tape facilitates determination of medication dosages and equipment sizes for children, by measuring the child against the length of the tape. If your facility uses Broselow tape we ask that you consider the following guidelines:
 - Update tapes – Replace outdated Broselow tapes with the most recent edition (2002). Several problems have previously been reported when using the 1998 edition of the tape, due to concentration of the drug in the cart not matching the concentration listed on the tape.
 - Facilitate proper measurement - Hang the tapes in the proper orientation with the red arrow, stating "Measure From This End," at the top. Teach staff to remember "RED to HEAD" when aligning the tape to the patient's body length during measurement. If the tape is laminated in plastic, be sure the plastic sleeve does not extend beyond the red arrow, potentially changing the measurement starting point.
 - Organize emergency drug supplies – If using the Broselow tape, stock medications and equipment in a way that facilitates equipment retrieval according to color-coded weight classes. Be sure to assess its effectiveness in quickly guiding clinicians to the appropriate supplies.
 - Educate staff - Establish a standardized approach to teaching clinicians how to use the Broselow tape and develop a competency tool to validate proficiency. Reeducate clinicians when converting to an updated version of the tape.
 - Assess preparedness – Hold mock codes in all pediatric clinical areas to ensure appropriate use of the Broselow tape.

AFL 05-02
Page 4
February 1, 2005

If you have any questions about this letter please call Loriann De Martini, Pharm.D.,
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Sincerely,

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