Loudoun County Emergency Medical Services Council, Inc.

EMS Policy #12

Security and Maintenance of Pre-Hospital Medications and Supplies

Origin: 04/91
Revision: 05/12

This policy has been established to support the requirements of the Operational Medical Director, the Virginia Pharmaceutical Board, the Virginia Office of EMS, the INOVA Loudoun Hospital Center, and the Loudoun County EMS Council, Inc. (EMS Council) pertaining to the security, storage, and maintenance of pre-hospital medications and associated administration supplies. The EMS Council approves and provides oversight of the countywide medication security system. Loudoun County Advanced Life Support Providers and the EMS Agencies are responsible for the security and maintenance of all medications and supplies utilized for pre-hospital emergency care.

When the President of an EMS Agency accepts the financial requirements of this policy, the Chief of the EMS Agency then bears full responsibility for that agency's compliance with this policy. Any variance to this policy, such as times when none of the Agency's personnel are authorized ALS providers, shall be documented in writing and bear the signatures of the Agency Chief, the Chief of any assisting Agency, the Operational Medical Director and the EMS Council.

The Chairperson of the EMS Council may delegate some of the responsibilities of this policy as necessary to fulfill those requirements. The designee shall be approved by the Operational Medical Director.

1. SECURITY OF PRE-HOSPITAL MEDICATIONS

A. Narcotic medications or any other medications identified as "Controlled" by the Virginia Pharmaceutical Board shall be secured under a double lock system.

   1. They must be stored in a separate wall mount double locked security box approved by the EMS Council and secured to the licensed EMS vehicle. Only locally authorized ALS Providers are permitted access to the security box.

B. All other medications, intravenous (IV) infusion supplies, needles, and syringes shall be secured in a locked compartment of a licensed EMS vehicle or a locked cabinet in the station. These compartments and cabinets shall be secured utilizing the locking system authorized by the EMS Council.

   1. The single exception shall be the security and storage of the WMD NERVE AGENT KIT. The storage and maintenance of the WMD Kits is covered in a separate policy.

C. Agencies shall provide a securable cabinet capable of storing a drug bag in its entirety for times when the vehicle contents may be subject to extremes in temperature without the benefit of interior climate control, such as when a vehicle is out of the station for repair. This cabinet shall not be portable and in a fixed location in the station. Agencies with multiple units may wish to select a cabinet capable of storing multiple kits. This cabinet shall be secured with a lock consistent with the lock system utilized by the EMS Council.

Note: Stations may store the equivalent of one drug bags worth of medications, excluding narcotics, as well as any number of additional approved intravenous fluids, Albuterol, Atrovent, and Dextrose 50% which must be stored in the locked station cabinet.

2. MEDICATION SECURITY SYSTEM

The EMS Council provides, and is responsible for, funding of a countywide medication security system consisting of approved security boxes, and standardized locking mechanisms and keys, which must be utilized by all ALS providers and EMS Agencies in the Loudoun County EMS system.

A. All medication keys, locks, and lock boxes are the property of the EMS Council.

B. All locally authorized ALS providers are assigned two keys for these locks. All keys are stamped with a number for accountability of specific keys assigned to locally authorized ALS providers. The EMS Council maintains a file of all assigned keys and locally authorized ALS providers. The EMS Council may order an audit of the Loudoun County EMS System at periodic intervals.

C. The EMS Council has established approved vendors to provide locks, keys, and service. In order to obtain additional locks, the EMS Agency is to notify the Chairman, Vice Chairperson or Operational Medical Director approved designee. These persons are the only authorized personnel maintained on the vendor's files to obtain locks and/or keys. The Agency will be notified when the order has been received to coordinate pick-up, delivery and installation.

3. SECURITY OF KEYS:

A. Locally authorized ALS providers and appropriate agency officers must complete the following steps to obtain keys:

1. Complete and endorse the "Recipient Agreement – Medication Security System Keys" form (see Appendix).

2. The "Recipient Agreement" form shall be given to the Chairman or Operational Medical Director approved designee who will provide the ALS provider with keys.

B. Lost or Stolen Keys

1. If at any time a key is lost or stolen, this information shall be **immediately reported** to the Chairperson of the EMS Council, Vice chairperson or Operational Medical Director approved designee. If the entire medication security system is compromised, the Chairperson will notify the EMS Council of the situation. Consistent with section 8.D below, the EMS Council will decide actions to be taken at that time.

2. The EMS Agency responsible for the breach of security may be held liable for damages including, but not limited to, costs associated with subsequent rekeying of the EMS Council medication security system.

C. Broken Keys and Locks

1. If at any time a key is broken, the remaining portion of the key shall be returned to the Chairperson, Vice Chairperson or Operational Medical Director approved designee. A replacement key will be issued. Proper documentation utilizing the Medication Security Systems Keys Exchange Form (See Appendix) shall be completed at the time of replacement and submitted to the EMS Council.

2. If a lock or any part of a locking mechanism is broken or fails to operate properly, the Chairperson, Vice Chairperson or Operational Medical Director approved designee shall be notified immediately. They will arrange, consistent with Section 2.C above, to have the authorized vendor contacted to schedule the repair. Should it not be possible to store the medications within the proper vehicle storage area securely, the medication kit will be removed to the station storage locker. The ECC will be notified to designate the unit as BLS-only until repairs can be completed.

4. CHANGES IN ALS PROVIDER STATUS

A. If an ALS provider resigns their ALS Local Authorization, or if it becomes suspended or revoked, the following shall apply:

1. The affected ALS Agency Chief or his/her designated ALS provider is responsible for obtaining the keys assigned to the ALS provider.

Note: The ALS Agency Chief must be an ALS provider or must designate an ALS provider to act on his/her behalf.

2. The Chairperson of the EMS Council or his/her designee shall be notified of the change in the ALS provider's status within 24 hours of the action.

3. The keys shall be returned to the Chairperson of the EMS Council or his/her designee. Proper documentation utilizing the Medication Security Systems Keys Exchange Form (See Appendix) shall be completed at the time the keys are returned and both the form and keys submitted to the EMS Council.

B. If an ALS provider changes his/her affiliation with an EMS Agency within the Loudoun County system:

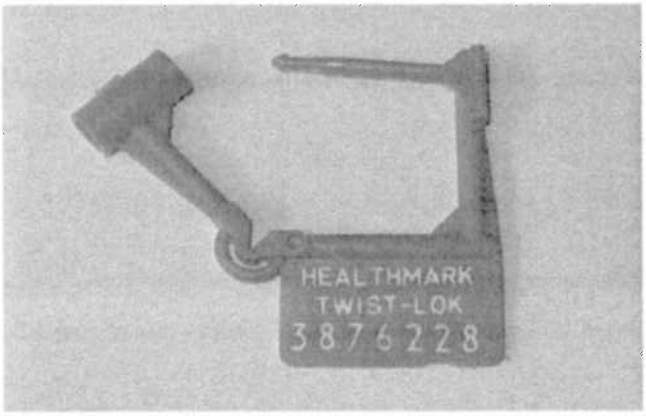
1. As the ***Agency*** is responsible for the security of keys, the provider shall surrender his/her assigned keys to the representative of the agency appearing on the signed Recipient Agreement Form. New keys will be issued according to Section 3.A, completing a new Recipient Agreement between the provider, the new agency leadership and the EMS Council.

5. ROUTINE INSPECTION OF MEDICATIONS AND SUPPLIES

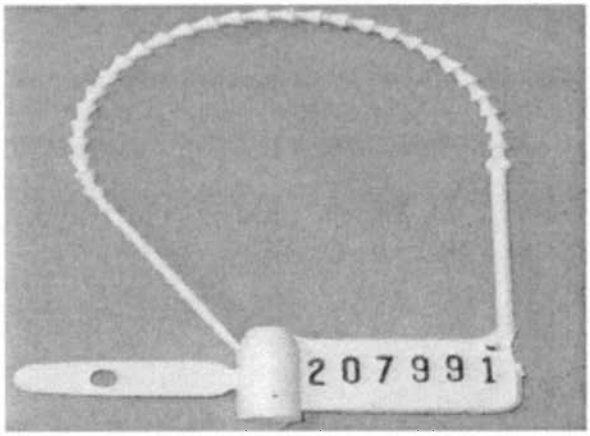
The Chief of each licensed EMS Agency is responsible for maintaining each of the medication kits utilized by the Agency. Maintenance of the kits includes the following specific responsibilities:

A. All agencies shall comply with EMS Policy #19 "Advanced Life Support Medication Kit". All medications other than IV fluids will be stored in the main medication kit compartment.

B. Agencies shall seal the medication compartment of the medication kits using a single use individually numbered seal. Not all numbered seals meet the 'single use' requirement. This 'single use' requirement applies only to area where medications are stored. The following style seal meets the single use requirement:



The following seal type **does not** meet the 'single use' requirements due to a provider's ability to both break and then re-use the seal and the ability to position the seal in a manner that seal appears engaged but is not:



C. Performing and documenting the results of regular inspections of the medication kits.

1. All agencies will inventory each of their medications kits a ***minimum*** of one per week. Once complete, the provider will seal the medication compartment with an individually numbered seal and record the seal numbers in a log consistent with Section 5.E below. The log must contain the number, the date and the ALS provider's name. An inventory sheet for each inspection shall be kept consistent with Section 5.E.3. An electronic or scanned version of a completed inventory sheet shall be deemed to comply with this requirement as long as the inspection may be reviewed by all operational officers of the agency at any time.

    a. Agencies that use an individually numbered, single-use seal affixed to the exterior of the ambulance's medication

compartment, which allows all personnel to verify the compartment has not been opened since the previous check, may reduce the required inspections to twice per month, spaced evenly within the month with the second check occurring no later than the 21st of the month. The nearest expiration date of the entire kit will be written on the reverse of the numbered seal.

2. ALS Providers arriving on duty shall complete a visual inspection of all the medication kits or compartments in the station, documenting consistent with Section 5.E.1 below. If the medication compartment or kit does not have intact seal(s) or if the seal numbers are not consistent with the recorded seal number(s) of the last complete medication inventory, the kit will be inventoried and documented consistent with Section E.3.
    a. ALS Providers should complete a new inventory of the kit that is on their primary EMS unit regardless of the presence of intact seals.
3. All providers (both ALS and BLS) should verify the climate control mechanism to the drug storage area is functioning within normal limits (50°F to 80°F).

D. Ensuring that the specified quantity of each of the medications and supplies listed on the "Medication Kit Inventory" (see Appendix) is present.
    1. Medications shall be checked for presence, proper quantity, damage, and expiration date.
    2. All other supplies such as IV supplies, etc., shall be appropriately inspected and inventoried.
    3. All medications, supplies, and the kit are stored clean and free from any bio-hazardous or other foreign material.
    4. Ensure that the security of the medication kit can be maintained.

E. Maintaining accurate documentation of the inspections.
    1. Medication checks shall be noted in the station logbook or computer system indicating the date and name of the ALS provider who completed the inspection (e.g., Unit XX-Y medications checked and secured on mm/dd/yyyy by ALS provider Name/#).

2. Apparatus check sheets shall allow for the entry of any numbered seal that can be verified by a BLS provider. For example, a BLS provider should document the seal is intact on the WMD kit and external narcotics locker or enter the name of the shift officer was notified of the discrepancy.
3. Each Medication Kit will have a dedicated logbook that shall contain no less than the most recent three months of medication checks sheets. This logbook will be stored on board the apparatus and shall be kept accessible by anyone (including BLS personnel) for compliance review. As such, the logbook may not be secured inside the locked climate controlled medication storage area. This logbook shall accompany the drug bag when placed in either a different unit or into a secured cabinet when the vehicle is undergoing repairs.
4. Stations utilizing an electronic means of documentation should allow such access to that system as to allow all officers of that agency (including BLS) to monitor compliance with this policy. Such access can be limited to viewing and printing a report containing the agency's unit numbers or drug bag numbers, current security tag number, date of last inspection and the closest expiration. Data captured must be stored in a non-alterable or 'locked' format to prevent the data from being changed at a later date.
5. Agencies may utilize the appendix of these protocols or may develop their own medication kit check sheets provided the check sheet contains all items in the appendix sheet. The completed check sheet will also need to contain, at minimum, the name of the person completing the inspection, the date of the inspection, the number of the seal/tag and the closest expiration date of the various medications.
6. Medication checklists shall be kept on record in the station for two (2) years, to coincide with the EMS Agency inspection.

6. MEDICATION KIT USAGE AND SECURITY

A. Medication Kits should be routinely stored with an individually numbered seal. The provider completing the inventory is responsible for the accuracy of the inventory.

1. Medication kits in apparatus without currently assigned in-station ALS staff shall be sealed. Medication kits stored in the station locker shall be individually sealed

2. Medication kit may be left unsealed during periods when an ALS provider is currently assigned to that ***specific unit***. Being on-duty in-station but riding another unit does not qualify for this exception (i.e. an ALS provider using a chase car cannot leave the medication kit on an ambulance unsealed). These kits may remain unsealed for the duration of the shift. The provider is still responsible for completing and documenting the medication kit inventory. The provider shall understand that the medication kit contents are their direct responsibility until the kit is re-inventoried and sealed.
3. When a kit is unsealed for use or inspection, any deficiency not on the previous inventory check sheet should be noted in the station log and the station officer(s) notified.
4. An ALS Providers who unseals a medication kit in the course of an emergency incident becomes directly responsible for the contents of the medication kit until the kit is re-inventoried and sealed.
    a. If the ALS provider is not assigned to that unit, they shall inventory and seal the kit prior to releasing the unit from the hospital or incident.
    b. ALS providers are responsible to maintain control of the medication kit until re-secured in the locked compartment. This includes securing or maintaining control of the kit when transferring care of a patient at the hospital.

7. MEDICATION EXCHANGE

A. Medications Used During an Incident
The ALS "Attendant in Charge" on an incident is responsible for ensuring that all medications and supplies used during a specific incident are replaced and that the medication kit is secured following that incident.

1. Medications used on patients transported to INOVA Loudoun Hospital (ILH) -Lansdowne or INOVA Cornwall will be replaced at the ER from the designated ER nurse.
2. When a medication is used during an incident resulting in transport to a hospital other than INOVA Loudoun Hospital (ILH) -Lansdowne or INOVA Cornwall, the medication will be replaced at the receiving hospital, provided the medication is replaced with a medication of the same concentration and quantity currently authorized on Loudoun County EMS units. In the event that the receiving hospital does ***not*** have the appropriate medication to replace the one used, the medication shall be replaced at ILH. The appropriate patient

information shall be supplied to ILH at the time the medication is replaced.

a. This policy may be altered by written agreement for purposes of providing or receiving mutual aid.

b. The replacement will require the submission of a completed call report and be done according to the procedures established by the Emergency Department.

3. In the event that a patient is transferred to another service (e.g. Helicopter, Mutual Aid unit), not transported, or transported to a hospital that cannot provide replacement medications or supplies, the ALS provider will make arrangements to obtain the necessary medications from ILH using the process outlined above. The appropriate patient information shall be supplied to ILH at the time the medication is replaced.

B. Expired or Expiring Medications

1. The exchange of **expiring** non-narcotic medications is restricted to the Pharmacy at INOVA Loudoun Hospital (ILH)-Lansdowne. Expiring regional narcotics pouch/controlled substance kits will be exchanged with the designated nurse in the Emergency Department at ILH-Lansdowne.

2. All medications to include narcotics pouch(s) are to be returned for exchange prior to the printed expiration dates. Within reason, the exchange of medication should not occur until within 15 days of expiration. Medications with month and year expiration dates (e.g. 01/01) expire on the last day of the month. Medications with a month, day, and year expiration (e.g. 01/25/01) will expire on the date noted. Controlled medications maintained in the separate pouch(s) shall be returned for exchange based on the earliest expiration date noted on the pouch.

3. In the event of a medication vial breaking, the event will be documented and witnessed. Replacement medication will be obtained from the pharmacy at INOVA Lansdowne.

4. On occasion, the normal supply for medications will be disrupted by national shortages outside the control of the local pharmacy. Should the pharmacy be unable to replace any medication due to a shortage, the expired medication will be removed from the unit and stored in the station's secure cabinet. Appropriate notes shall be made on the medication kit inventory check sheet. Notifications of the shortage shall be made to the Office of the Medical Director and EMS BC(s).

a. Providers and Officers shall use good judgment in reallocating the medications in other EMS units to provide maximum ALS capability.

b. Once the shortage has resolved, the expired medication will be presented to the ILH Pharmacy to be exchanged per the normal procedure.

C. Controlled Medications

1. Exchange of controlled medications shall be handled with the assistance of the designated nurse in the ED, in accordance with the established narcotic exchange policy of the hospital.

2. When replacing controlled medications that were used on a specific incident, the ALS provider is responsible for completing the Controlled Medications form found in the controlled medication pouch. The designated nurse will then verify the medications in the pouch, sign the form, and provide a replacement pouch to the ALS provider.

   a. If there is any remaining controlled medication after termination of patient care, it shall be disposed of in the manner approved by the Chief Pharmacist at INOVA Loudoun Hospital. The ALS provider, in the presence of a witness, must waste the unused portion of the medication. The witness to the wasting of the medication will then sign the Controlled Medications form that they have witnessed the wasting of the remaining medication.

3. For patient(s) transported to hospitals outside the Northern Virginia EMS Council Region, controlled medications may generally be exchanged one-for-one at the outside hospital pharmacy. The Pouch may then be exchanged with the designated nurse at ILH Lansdowne or Cornwall. If unable to exchange medication at outside hospital, bring used medication vial and documentation to ILH for exchange. A copy of the completed report, including the physician's signature, shall be attached to the Controlled Medications form.

4. When exchanging controlled medications due to expiration, the ALS provider will hand the sealed medication pouch to the designated ED nurse who will exchange the pouch in accordance with the policies of ILH Pharmacy.

5. In the event of a medication vial breaking, the event will be documented and witnessed. A copy of the documentation will need

to be included in the pouch. Replacement medication will be obtained from the ER at INOVA Lansdowne.

8. COMPLIANCE REVIEW, DISCREPANCIES AND INVESTIGATIONS

Agencies shall recognize the responsibility and burden carried by the EMS Council which allows the individual agencies to carry medications necessary to perform their mission. As such, agencies will comply fully with any compliance review or investigation being conducted regarding the acquisition, storage or use of the medications. Investigations will be conducted by the Office of the Medical Director. The Office of the Medical Director may utilize additional personnel, including the system's Quality Improvement Officer(s) and EMS Supervisors or Battalion Chief. Office of the Medical Director investigations will not take the place of nor interfere with any criminal investigation being conducted by a law enforcement agency.

A. Any discrepancies regarding the maintenance of the medication kits and deficiencies of non-medication equipment will be documented with the chief of the provider's agency. Persistent failure by any individual to comply with this policy must be brought to the attention of the Office of the Medical Director for disposition.

B. In addition to the Members of the Office of Medical Director, Designee(s) of the Deputy Chief of EMS are authorized to perform compliance checks to maintain system accountability to this policy. Agency officers should be prepared to assist in accessing check sheets, electronic files or other documentation. Discrepancies will be forwarded to the Office of the Medical Director

C. Any discrepancies identified regarding the medications shall be reported to the Chief of the EMS Agency and the EMS Council Chairperson, Vice Chairperson or Operational Medical Director approved designee within 24 hours of the discovery of the discrepancy. For all medication diversions, the Agency shall notify the Virginia Department of Health Office of Emergency Medical Services in the manner and time frames established in the Rules and Regulations. The Chairperson of the EMS Council or Operational Medical Director approved designee will notify the Operational Medical Director once an investigation is being conducted. If evidence of criminal activity is present, the EMS Agency shall immediately contact law enforcement.

D. In all other instances, the decision to notify law enforcement authorities will be decided upon following the initial investigation of the incident and a review of the information by the Operational Medical Director, Chairperson of the EMS Council, Vice Chairperson or Operational Medical Director approved designee.

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