



Central Shenandoah EMS Council Regional Drug Box Program Best Practices

Updated: May 26, 2016

The Regional Drug Box Program Best Practices relate to the use of the CSEMS regional drug and IV kits. These best practices serve to provide regional guidance on the acquisition, storage, usage and maintenance of the drug box system. Local pharmacies may issue policies that supersede or supplement these best practices. The success of the regional drug box program is based on the full understanding and support of the system by EMS providers, hospital pharmacists, Operational Medical Directors and emergency department attending physicians. Please contact the CSEMS Council at (540) 886-3676 if you have any questions or need assistance.

1.0 Exchanging Used Drug Boxes

A printed or written call sheet with documented administered medications must accompany a drug box when being exchanged. Every effort should be made to include the patient's name, date of birth, incident date and Attendant-in-Charge name. A physician signature is ONLY required if there is a variance from standing protocol. The pharmacy representative will open the out-going drug box and verify with an EMS provider the count of controlled substances II-V and seal the drug box. If a patient is transported to a hospital not participating in the CSEMS regional drug box exchange, pronounced dead on scene or transferred to another agency and the drug box cannot be immediately exchanged, the following steps should be taken:

1. Verify all unused controlled substances (CII-V) as defined in 1.8.
2. Seal the box with a different colored tag not utilized by participating hospitals.
3. Document new tag number on PPCR.
4. Write "used" across a piece of tape and place on top of box.
5. Place completed PPCR with used drug box.
6. Secure drug box in approved area until exchanged.
7. Every effort should be made to exchange used drug box within 48 hours.

1.1 Broken Drug Box Seals or Missing Controlled Substances (CII-V)

Drug boxes are to be sealed at all times. Should a seal be accidentally broken, or a drug box opened but not used, the controlled substances (CII-V) should be immediately verified and the box returned to the hospital/pharmacy to be exchanged.

If the seal on the drug box is discovered missing while performing patient care or after arriving at the hospital:

1. Continue patient care. You may continue to utilize the contents of the box.

2. If the drug needed is not present, consider requesting another unit to meet en route without delaying transport.

Should an EMS provider find a box with a broken seal and find missing or altered controlled substances (CII-V) (fentanyl, morphine, ketamine or midazolam), take the following actions to report a drug box diversion:

1. Limit additional handling of the box.
2. Notify local law enforcement.
3. Notify the hospital pharmacy where the box was packed.
4. Notify the appropriate agency officer.
5. Complete and file a drug diversion form with the Office of EMS (see 12 VAC 5-31-520, D of the Virginia EMS Rules and Regulations) http://www.vdh.virginia.gov/oems/files_page/
6. Have drug box inspection forms ready for police, pharmacy and Office of EMS personnel.

1.2 Drug Box Content Problems

Should a field provider find a drug box inappropriately stocked with drugs or supplies, a Drug Box Incident Report should be completed by the field provider finding the problem (See Appendix A). After completion, the form should be returned to the pharmacy in the drug box, a copy should be faxed to the regional EMS Council and a copy should be retained by the EMS agency. "Drug diversion" should also be reported to the Virginia Office of EMS (refer to section 1.1).

If the problem with a drug box is found by pharmacy staff, the Drug Box Incident Report should be completed and forwarded to the regional EMS Council office.

The Drug Box Incident Reports are stocked in the drug boxes and can be downloaded from the regional EMS Council's web sites.

1.3 Drug Box Inventory

An inventory of all drug boxes is to be performed by each EMS agency on a routine basis. The inventory should track drug box expiration dates and be performed with a frequency such that drug boxes do not expire. An agency may only exchange two (2) expired drug boxes at a time. The boxes should be exchanged prior to the expiration date. Regional pharmacies are not expected to exchange expired drug boxes after hours and on weekends.

1.4 Storage and Security of Drugs and Related Supplies

An area used for storage of drugs and administration devices and a drug kit used on an EMS vehicle, shall comply with requirements established by the Virginia Board of Pharmacy and the applicable drug manufacturer's recommendations for climate-controlled storage.

Drugs and drug kits shall be maintained within their expiration date at all times.

Drugs and drug kits shall be removed from vehicles and stored in a properly maintained and locked, secure area when the vehicle is not in use unless the ambient temperature of the vehicle's interior drug storage compartment is maintained within the climate requirements specified in this section.

An EMS agency shall notify the Office of EMS in writing of any diversion of (i.e., loss or theft) or tampering with any controlled substances, drug delivery devices or other regulated medical devices from an agency, facility or vehicle. Notification shall be made within 15 days of the discovery of the occurrence.

An EMS agency shall protect EMS vehicle contents from climate extremes.

Reference: Virginia EMS Regulations 12 VAC 5-31-520.

1.5 Drug Box Acquisition and Entry Into the System

When an agency places an ALS vehicle in service, the agency is required to contact the regional EMS Council office to purchase the necessary drug boxes. Before being placed into the system, the drug boxes are assigned an inventory control number and are labeled by the regional EMS Council office. After receiving inventory control numbers and labeling, the boxes are taken by the agency to the closest pharmacy for initial stocking. The pharmacy will advise when the stocked drug box may be picked up by the agency.

1.6 Drug Box Cleanliness

When a drug box is used, the EMS provider is responsible for disposing of all opened or used sharps and other trash that may be in the box prior to returning the box to the pharmacy for exchange. In addition, the boxes should be clean and free of blood or other body fluids.

Before accepting a drug box for exchange, pharmacy staff should check to ensure that the box is clean and free of exposed sharps. If it is not, pharmacy staff should advise the EMS provider of this and require the box be cleaned before making the exchange. In the event the box is left at the hospital during hours the pharmacy is not open, or in an ED exchange locker, the receiving pharmacy should contact that agency and request that a representative of the agency respond immediately to clean the box. Pharmacy personnel should also complete a Drug Box Incident Report and forward the report to the regional EMS Council.

1.7 Drug Box Contamination

It is recommended that providers access the drug box with clean hands. If possible, providers should change gloves or use hand sanitizer after providing direct patient contact. Pharmacies will not accept boxes visibly contaminated with blood/body fluid or that have potentially been contaminated by VRE, GRE or MRSA.

Procedures for cleaning drug boxes that are contaminated with known VRE, GRE and MRSA.

1. Two providers will be needed. The first provider holds the clean basin (obtained from ED staff). Be sure that the clean basin is not placed on any contaminated surface. The second provider wears gloves and empties all drugs in plastic bags into the clean basin. All drugs that are not in plastic bags will be discarded into Contaminated Materials Boxes.
2. Clean the empty drug box using the hospital-recommended disinfectant and cleaning procedure.
3. Rewrite the ambulance report form on a clean form.
 - a. ADD: "Drug box has been decontaminated. Drugs not in plastic bags have been placed in CMC box and drugs in plastic bags have been returned in clean basin."
 - b. If controlled substances (CII-V) have been contaminated, waste the drugs in the presence of the shift manager and have the shift manager sign as a witness (see section 1.9).

Bring the cleaned drug box, rewritten patient care report and basin of clean drugs to the pharmacy for a drug box exchange.

1.8 Disposal of Partially-Used Controlled Drugs

Partially used controlled substances (CII-V) not administered to the patient will be discarded at the hospital. The disposal must be witnessed by an EMS crew member, or authorized licensed personnel (RN, MD, pharmacist) as permitted by institution. The witness must counter-sign the Patient Care Report or designated form, where the advanced life support provider has clearly indicated the drug wasted.

1.9 Variance of Drug Box Contents

Any variance of drug box contents should be communicated to the CSEMS Pharmacy Committee group via email. Variances should include:

1. Decrease in par level due to shortage
2. Substitution of drug or supply contents

Medication variances will be noted on the white sticker located on the top of the drug box.

1.10 Drug Box Exchange Form

Regional drug boxes are stocked with a "Drug Box Exchange Form." The form is intended for use when documenting the minimum information required to exchange a CSEMS drug box with the participating hospital when completion of a standard patient care report (PCR) is not possible. Use of this form is NOT required in addition to the approved PCR (See Appendix B).

Appendix A

CSEMS Drug Box Incident Report



CSEMS Drug Box Incident Report

Form is intended for use by either hospital/pharmacy or EMS staff when documenting an issue or incident involving a CSEMS drug box.

EMS Provider Instructions: Complete the report. 1) Place a copy in the drug box, 2) retain a copy with the patient care report and 3) forward a copy of the form to the Central Shenandoah EMS Council by fax.

Pharmacy/Hospital Staff Instructions: Complete the report and submit a copy to the Central Shenandoah EMS Council by fax.

CSEMS FAX NUMBER: 540-886-3735

Drug Box Information		
_____	_____	
Date of Incident	Time of Incident	
_____	_____	_____
IV Start Kit #	Trauma Box #	Cardiac Box #
_____	_____	
Hospital packed by	Initials (on box label)	

Contact Information	

Name	

Agency/Department	

_____	_____
Daytime Telephone Number	E-mail Address

Description of Incident

(Do not write below this line)

Investigation Results (To be completed by the person investigating the incident)		
_____	_____	_____
Investigator's Name	Agency/Department	Date Investigated

Central Shenandoah EMS Council Tracking (To be completed by CSEMS Council staff)		
_____	_____	_____
Received Date	Follow-up Date	Name of CSEMS Council Staff conducting follow-up
Comments: _____		

Appendix B

CSEMS Drug Box Exchange Form



CSEMS Drug Box Exchange Form

Form is intended for use when documenting the minimum information required to exchange a CSEMS drug box with the participating hospital when completion of a standard patient care report (PCR) is not possible. Use of this form is NOT required in addition to the approved PCR.

AFFIX PATIENT ID LABEL
(IF APPLICABLE)

EMS AGENCY NAME	INCIDENT NUMBER	MM	DD	YYYY
PATIENT NAME (Last, First MI)	DOB	BOX NUMBER IN	BOX NUMBER OUT	

CONTROLLED MEDICATION ADMINISTRATION

<input checked="" type="checkbox"/>	MEDICATION (standard supply)	DOSE/AMOUNT GIVEN	DOSE/AMOUNT WASTED
<input type="checkbox"/>	FENTANYL (100 mcg/2 mL)		
<input type="checkbox"/>	MIDAZOLAM (5 mg/mL)		
<input type="checkbox"/>	MORPHINE (10 mg/mL)		
<input type="checkbox"/>	KETAMINE (200 mg/20 mL)		
<input type="checkbox"/>	(Other)		

CREW MEMBER PRINT NAME (Last, First, MI)	CREW MEMBER SIGNATURE
CREW WITNESS PRINT NAME (Last, First, MI)	CREW WITNESS SIGNATURE

Document administration of controlled drugs for online medical control order. Physician signature required.

Online Medical Control Order:	Physician Signature
	Physician Name (Printed)

NON-CONTROLLED MEDICATION ADMINISTRATION

<input checked="" type="checkbox"/>	MEDICATION (standard supply)	QTY USED	<input checked="" type="checkbox"/>	MEDICATION (standard supply)	QTY USED
<input type="checkbox"/>	Adenosine 6 mg/2 mL vials		<input type="checkbox"/>	Methylprednisolone 125 mg/2 mL vials	
<input type="checkbox"/>	Albuterol 2.5 mg/3 mL unit dose		<input type="checkbox"/>	Metoprolol 5 mg/5 mL ampules or vials	
<input type="checkbox"/>	Amiodarone 150 mg/3 mL vials		<input type="checkbox"/>	Midazolam 5 mg/mL vials	
<input type="checkbox"/>	Aspirin 81 mg tablets		<input type="checkbox"/>	Morphine 10 mg/mL vials	
<input type="checkbox"/>	Atropine 1 mg/10 mL syringe		<input type="checkbox"/>	Naloxone 2 mg/2 mL vial	
<input type="checkbox"/>	Diphenhydramine 50 mg/mL vials		<input type="checkbox"/>	Nitroglycerin paste 1 g packets	
<input type="checkbox"/>	Calcium Chloride 1 g/10 mL syringe		<input type="checkbox"/>	Nitroglycerin 0.4 mg tablets	
<input type="checkbox"/>	Cefazolin 1 g vial		<input type="checkbox"/>	Ondansetron 4 mg ODT tablets	
<input type="checkbox"/>	Dextrose 50% 25 g/50 mL syringe		<input type="checkbox"/>	Ondansetron 4 mg/2 mL vials	
<input type="checkbox"/>	Dopamine 200 mg/5 mL vials		<input type="checkbox"/>	Prednisone 20 mg tablets	
<input type="checkbox"/>	Epinephrine 1:10,000 1 mg/10 mL syringe		<input type="checkbox"/>	Sodium Bicarbonate 50 mEq/50 mL syringe	
<input type="checkbox"/>	Epinephrine 1:1000 1 mg/mL ampules/vials		<input type="checkbox"/>	Tranexamic Acid 1 g vials	
<input type="checkbox"/>	Fentanyl 100 mcg/2 mL ampules/vials				
<input type="checkbox"/>	Glucagon 1 mg vial w/ diluent			ACCESSORIES	QTY USED
<input type="checkbox"/>	Haloperidol 5 mg/mL vials		<input type="checkbox"/>	IV administration sets	
<input type="checkbox"/>	Ipratropium 500 mcg/2.5 mL unit dose		<input type="checkbox"/>	IV needles	
<input type="checkbox"/>	Ketamine 200 mg/20 mL vial		<input type="checkbox"/>	IV Solution - D ₅ W 100 mL bag	
<input type="checkbox"/>	Lidocaine 2% 20 mg/mL vial		<input type="checkbox"/>	IV Solution - D ₅ W 250 mL bag	
<input type="checkbox"/>	Magnesium Sulfate 1 g/2 mL vials		<input type="checkbox"/>	IV Solution - Normal Saline 1000 mL bag	

CREW MEMBER PRINT NAME (Last, First, MI)	CREW MEMBER SIGNATURE
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