Southeast Michigan Regional Protocol
Medication Exchange and Replacement Procedure for Oakland, Macomb, Detroit East, HEMS, Monroe, St. Clair, Lapeer, Genesee, Washtenaw/Livingston Medical Control Authorities Version June 17, 2025

Medication Section Addendum

Initial Date: 4/2/24 Revised Date:6/17/25

MEDICATION BOX CONTENTS DRUG/ITEM	CONCENTRATION	PACKAGING	QUANTITY
Acetaminophen	650 mg/20.3 mL	Unit Dose Cup	1
Adenosine	6 mg/2 mL	2 mL Vial/Syringe	3
Albuterol	2.5 mg/3 mL	3 mL Vial - UD	6
Amiodarone	150 mg/3 mL	Amp/Vial	3
Aspirin	81 mg/tablet	BT/UD – chewable	1 BT or 4 UD tabs
Atropine	1 mg/10 mL	10 mL Syringe	3
Calcium Chloride	1 g/10 mL	10 mL Syringe	2
Ceftriaxone	2gm vial	2gm vial	1
Dextrose 50%	25 g/50 mL	50 mL Syringe	1
Diphenhydramine	50 mg/1 mL	1 mL Vial	2
Epinephrine	1 mg/1 mL	1 mL Amp/ Vial	2
Epinephrine	1 mg/10 mL	10 mL Syringe	7
Fentanyl	50 mcg/mL	2 mL Vial/Amp	3
Ipratropium Bromide	0.02%	2.5 mL Vial - UD	2
Ketamine	100mg/ml	5ml Vial	1
Ketorolac	15mg/ml	1ml Vial	1
Lidocaine	100 mg/5 mL	5 mL Syringe	3
Magnesium Sulfate	1 g/2 mL	Amp/Vial	4
Methylprednisolone	125 mg	Vial	1
Midazolam	5 mg/1 mL	1 mL Vial	4
Morphine	10 mg/1 mL	1 mL Amp/Vial	2
Naloxone	2 mg/2 mL or 0.4 mg/mL	4 x 2 mL Syringe or 2 x 10 mL Vial	Total = 8mg
Nitroglycerin	0.4 mg/tab	Bottle	1
Ondansetron	2 mg/mL	2 mL Vial	2
Ondansetron ODT	4mg	Tablet	2
Prednisone	50 mg tab	50 mg Tab	1
Racepinephrine 2.25% with 3 mL NS	11.25 mg/0.5 mL	0.5 mL Vial	1
Sodium Bicarbonate	50 mEq/50 mL	50 mL Syringe	2
Sodium Chloride	0.9%	100 mL Bag	2
Sodium Chloride	0.9% Preservative Free	20-30 mL Vial or 10 mL syringes	1 2
Tranexamic Acid (TXA)	100mg/ ml	10 ml Vial	1
Alcohol Pad			12
Incident Report Form			1
IV Additive Labels			3

IV Tubing with Y Site Pre-pierced Reseal	60 drops/mL(mini drip)		2
Nebulizer			1
Blunt Cannula	18 G x 1 inch		5
Filter Needle	18-21 G		3
Intranasal Mucosal Atomization Device			1
Syringe	5 ml		5
Syringe	20 mL		1
Syringe	10 mL		5
Syringe with needle/Luer Lock	1 mL		5
Syringe with needle	3 mL – 21/22 G x 1.5 inch		5
Oral Liquid Syringe	10 ml		1
Needle	18 G x 1.5 inch		3
Pediatric Needle	25 G x 1 inch		2
Red Lock			1
Replacement Form			1
Three or Four-Way Stopcock			1

SEM/EMS MEDICATION BOX CONTENTS AND SCHEMATIC

Top Shelf

Acetaminophen	**Sodium Chloride 0.9%**	**Misc. Supplies**
650 mg/ 20.3 mL Unit dose cup X 1 **Magnesium Sulfate** 1 g/ 2 mL Amp/ Vial X 4	Preservative Free (1) 20 – 30 mL Vial or (2) 10 mL prefilled syringe **Naloxone** 2mg/ 2ml Syringe x 2(+ 2 below) **Naloxone** 2 mg/ 2 mL or 0.4 mg/ mL 4 x 2 mL Syringe or 2 x 10 mL Vial Total = 8 mg **Intranasal Mucosal Atomization Device** - x 1	Alcohol Pad – x 12 Blunt Cannula (18 G x 1 inch) – x 5 Filter Needle 18 – 21 G – x 3 IV Additive Labels x 3 Needle (18 G x 1.5 inch) – x 3 Pediatric Needle (25 G x 1 inch) x 2 Three or Four Way Stopcock x 1 Red Lock x 1

Amiodarone	**Adenosine**	**Epinephrine**	**Diphenhydramine**	**Aspirin 81 mg**	**Ondansetron**
150 mg/ 3 mL Amp/ Vial X 3	6 mg/ 2 mL 2 mL Vial/Syringe X 3	1mg/ 1 mL Amp/ Vial X 2	50 mg/ 1 mL 1 mL Vial X 2 **Tranexamic Acid 100mg/ml 1 x 10ml vial**	**Chewable Tablet** X 1 Bottle OR 4 UD Tabs **Nitroglycerin** 0.4 mg/ Tab Bottle X 1	2 mg/ mL 2 mL Vial X 2 **Ondansetron** 4mg ODT 2 Tabs

Middle Shelf

Controlled Substances	**Methylprednisolone**	**Ipratropium**	**Albuterol**	**Nebulizer**
Fentanyl 50 mcg/ mL – 2 mL Vial/Amp x 3 **Midazolam** 5 mg/ 1 mL- 1 mL Vial x 4 **Morphine** 10 mg/ 1 mL- 1 mL Vial/Amp x 2 **Ketamine** 100mg/ml 5ml Vial x 1	125 mg/ Vial X 1 **Prednisone** 50 mg Tablet X 1 Ceftriaxone 2gm vial X 1	**Bromide 0.02 %** 2.5 mL Vial – UD X 2 **Ketorolac** 15mg/ml Vial X 1	2.5 mg/ 3 mL 3 mL Vial – UD X 6	X 1 **Racepinephrine** 2.25 % 11.25 mg/ 0.5 mL 0.5 mL Vial X 1 3 mL NS X 1

Bottom Shelf

Bag of Syringes Syringe (With needle/ Luer Lock) – 1 mL x 5 Syringe 3 mL (21/ 22 G x 1.5 inch) – 3 mL x 5 Syringe – 5 mL x 5 Syringe – 10 mL x 5 Syringe – 20 mL x 1 **Lidocaine** 100 mg/ 5 mL – 5 mL Syringe x 3 **Calcium Chloride** 1 g/ 10 mL – 10 mL Syringe x 2 **Atropine** 1 mg/ 10 mL – 10 mL Syringe x 3 **Sodium Chloride** 0.9 % - 100 mL Bag x 2	**Sodium Bicarbonate** 50 mEq/ 50 mL – 50 mL Syringe x 2 **Dextrose 50%** 25 g/ 50 mL – 50 mL Syringe x 1	**Epinephrine** 1 mg/ 10 mL – 10 mL Syringe x 7 IV Tubing With Y Site Pre-pierced Reseal - 60 drops/mL (mini drip) x 2 **Forms** Replacement/ Schematic/ Incident-Discrepancy

SEM/EMS ACCESSORY PACK (A-PACK) CONTENTS
Version 6/17/25 (Discard all previous versions) Needleless stock only!

DRUG/ITEM	CONCENTRATION	PACKAGING	QUANTITY
Albuterol	2.5 mg/ 3 mL	3 mL Vial – UD	6
Aspirin	81 mg/Chewable tablet	UD Tabs	4
Dextrose 50%	25 g/50 mL	50 mL Syringe	1
Intranasal Mucosal Atomization Device			1
Ipratropium Bromide (in baggie)	0.02%	2.5 mL Vial – UD	1
Naloxone	2 mg/2 mL or 0.4 mg/mL	2x2 mL Syringe or 1x10 mL Vial	Total = 4 mg
Nitroglycerin	0.4 mg/ Tab	Bottle	1
Nebulizer			1
Ondansetron	2 mg/ mL	2 mL Vial	2
Ondansetron ODT	4mg	Tablet	2
Prednisone	50 mg tab	50 mg Tab	1
Blunt Cannula	18 G – 1 inch		2
Syringe 3 mL with needle	21/22 G x 1.5 inch needle		2
Red Lock			1
Replacement Form			1
Incident Report Form			1
Three or Four-Way Stopcock			1

SEM/EMS ACCESSORY PACK (A-PACK) SCHEMATIC

Green Lock through zipper and eyelet

(Place behind Albuterol on this side)
Dextrose 50%
50 mL Syringe
25 gm/ 50 mL (1)

Nebulizer (1)
(Place on this side)

(Elastic Holder)
Nitroglycerin
0.4 mg/ Tab
(1) bottle

Incident Report Form (1)

(Inside Front Pocket)

Albuterol
2.5 mg/ 3 mL
Vial UD (6)

Blunt Cannula
18 G x 1 inch (2)

Replacement Form (1)

(Folded in half and placed along inside back of A-Pack)

Ipratropium Bromide 0.02% Vial

Prednisone
(In baggie) (1)

Naloxone 2 mg/ 2 mL or 0.4 mg/ mL
2 x 2 mL Syringe 1 x 10 mL Vial
Total = 4 mg

50 mg Tab UD (1)

(Inside Front Pocket)

Yellow Pharmacy Label

Aspirin
81 mg Tab UD
Chewable (4)

Three or Four-Way Stopcock (1)

Syringe 3 mL with 21 G x 1.5 inch needle (2)

Red Lock (1)

Intranasal Mucosal Atomization Device (1)

Ondansetron 2 mg/ mL - 2 mL vial (2)

Ondansetron ODT 4mg
2 Tablets

SEM/EMS MEDICATION BOX/PACK INCIDENT/DISCREPANCY FORM

If there is any discrepancy with the contents of this Medication Box or A-Pack, this form **MUST** be filled out by the person(s) discover the discrepancy. **The participating hospital pharmacist is to be notified immediately if controlled substance(s) are involved in a discrepancy.** The pharmacy must send the form and any supporting documentation to **THE PARTICIPATING MEDICAL CONTROL AUTHORITY WHERE THE INCIDENT/DISCREPANCY OCCURRED.**

June 17, 2025 (Discard all previous versions)

EMS Agency or Hospital Name:		Date Discovered:	
Reporting Individual(s) Name(s):			
Witness to Discrepancy:			
TYPE	**BOX OR PACK #**	**RED SEAL #**	**GREEN SEAL #**
☐EMS MEDICATION BOX			
☐A-PACK			
☐OTHER			
RESTOCKING INFORMATION		**RECEIVING INFORMATION**	
Date Last Restocked:		Receiving Hospital:	
Restocking Hospital:		Receiving Pharmacist:	
Phone #		Phone #	
PLEASE INDICATE THE NATURE OF THE ISSUE			
☐CONTROLLED SUBSTANCE DISCREPANCY (MUST COMPLETED SECTION BELOW)			
☐DAMAGED MEDICATION CONTAINER			
☐STOCKING ISSUE (MED/SUPPLY)			
☐CLEANING ISSUE			
☐DAMAGED EMS MEDICATION BOX/A-PACK			
☐OTHER			

MEDICATION	**DESCRIPTION STRENGTH/SIZE/VOLUME**	**QUANTITY # OF VIALS/AMPS**	**DISCREPANCY MISSING/BROKEN**
☐Fentanyl			
☐Morphine			
☐Midazolam			
☐Naloxone			
☐Ketamine			

EMS RUN INFORMATION			
EMS AGENCY:	**UNIT #:**	**RUN #:**	**MCA:**
ADDITIONAL INFORMATION REGARDING MEDICATION BOX/PACK INCIDENT/DISCREPANCY			

This document can be faxed/emailed to the appropriate MCA: **Detroit East** info@demca.org; **Genesee** 810-262-2556; **HEMS**mail@hems.org or 734-727-7281; **Lapeer** 810-664-0681; **Macomb** ems@mcemsmca.org; **Monroe** Joella.Cousino@ProMedica.org; **Oakland** ems@ocmca.org; **St. Clair** 810-985-3012; **Washtenaw/Livingston** WashtenawLivingstonMCA@washtenaw.org

SOUTHEAST MICHIGAN (SEM) REGIONAL

MEDICATION BOX/A-PACK AND IV EXCHANGE PROCEDURES

PLEASE POST IN ALL MEDICATION EXCHANGE AREAS

STEP 1: EMS Personnel must complete a SEM Med Box/A-Pack/IV Supply Use/Replacement Form and/or the SEM IV Supply Use/Replacement Form (EMS Run Report – Genesee County MCA). All information must be complete. Used Medication Boxes/A-Packs must be cleared of contaminated items, cleaned, and sealed appropriately.

STEP 2: Hospital staff reviews form for completeness and receiving prescriber signature (only required for cases in which controlled substances are used). Staff unlocks cabinet and allows removal of appropriate supplies. Both EMS personnel and hospital staff complete the Medication Box/A-Pack and IV Supply Exchange Log. Both EMS and hospital staff ensure that the correct Medication Box/A-Pack numbers are recorded.

STEP 3: The original copy of the SEM Medication Box/A-Pack/IV Supply Use/Replacement Form shall be left in the MCA cabinet. Because the hospital staff person must review the documentation form, it may not be able to be placed in the Medication Box/A-Pack before it is sealed. It will be necessary for the pharmacist to collect all separated Documentation Logs that are stored in the cabinet, when restocking drug boxes.

STEP 4: The MCA cabinet must be re-locked when the exchange is complete.

THESE PROCEDURES ALSO APPLY WHEN ONLY AN IV FLUID/SUPPLY EXCHANGE IS COMPLETED.

NOTE: Receiving Prescriber: Physician, P.A., N.P

DATE	AGENCY NAME	EMS AGENCY RUN #	HOSPITAL RECEIVING STAFF	# OF BOX/A-Pack-IN	# OF BOX/A - Pack-OUT	IV REPLACEMENT YES OR NO

SEM MED BOX/A-PACK SUPPLY USE/REPLACEMENT FORM

June 17, 2025

Agency: Hospital: Date:

Unit #: Incident #: EMS Crew (Names):

Patient Name: Patient DOB

Medication	Unit/Size	Qnty	Used	Note
Acetaminophen 650 mg/20.3 mL 10 mL syringe in bag	Unit dose cup	1		
Adenosine 6 mg/2mL	Vial/Syringe 2 mL	3		
Albuterol 2.5 mg/3mL*	Vial – UD 3 mL A-Pack	6 6		
Amiodarone 150 mg/3 mL	Amp/Vial	3		
Aspirin 81 mg chewable tablets*	X 1 Bottle or 4 UD Tabs A-Pack	1 4		
Atropine 1mg/10 mL	Syringe 10 mL	3		
Calcium Chloride 1 g/10 mL	Syringe 10 mL	2		
Ceftriaxone	2gm vial	1		
Dextrose 50% 25 g/50 mL*	Syringe 50 mL A-Pack	1 1		
Diphenhydramine (Benadryl) 50 mg/1 mL	Vial 1 mL	2		
Epinephrine 1 mg/1 mL	Amp/Vial 1 mL	2		
Epinephrine 1 mg/10 mL	Syringe 10 mL	7		
Ipratropium Bromide 0.02% (In Baggie) *	2.5 mL Vial – UD A-Pack	2 1		
Ketorolac 15 mg	1 mL Vial	1		
Lidocaine 100 mg/5 mL	Syringe 5 mL	3		
Magnesium Sulfate 1 g/2 mL	Amp/Vial	4		
Methylprednisolone 125 mg	Vial	1		
Naloxone* 2 mg/2 mL or 0.4 mg/mL A-Pack	4 x 2 mL Syringe Or 2 x 10 mL Vial Total = 8 mg	4 2		
Nitroglycerin* 0.4 mg/tab	Bottle A-Pack	1 1		
Ondansetron 2 mg/mL*	2 mL Vial	2		
Ondansetron 4 mg ODT*	4 mg tab	2		
Prednisone 50 mg tab*	50 mg tab A-Pack	1 1		
Racepinephrine 2.25% 11.25 mg/0.5 mL	0.5 mL Vial & 3 mL NS	1		
Sodium Bicarbonate 50 mEq/50 mL	Syringe 50 mL	2		
Sodium Chloride 0.9% (Preservative free)	Vial 20-30 mL or 10 mL syringe	1 2		
Sodium Chloride 0.9%	Bag 100 mL	2		
Tranexamic Acid (TXA) 100 mg/mL	10 mL Vial	1		

Controlled Substances	Unit/Size	Qty/D dose	Dose Given	Dose Wasted
Fentanyl 50 mcg/mL	Vial/Amp 2 mL	3		
Midazolam 5 mg/1 mL	Vial 1 mL	4		
Morphine 10 mg/1 mL	Vial/Amp 1 mL	2		
Ketamine 100 mg/mL	Vial 5 mL	1		

Documentation of Controlled Substance Waste (Please Print)

Witness: Medic:

I attest that all Controlled Substances are present or accounted for

Name: Signature:

Medication	Unit/Size	Qnty	Used	Note
Alcohol Pads		12		
Incident Report Form*	A-Pack	1 Each		
IV Additive Labels		3		
IV Tubing 60 drops/mL (Minidrip) with Y Site Pre-Pierced Reseal		2		
Nebulizer*	A-Pack	1 Each		
Blunt Cannula 18 g – 1 inch*	18 g x 1 inch A-Pack	5 2		
Filter Needle	18-21 g	3		
Intranasal Mucosal Atomization Device	A-Pack	1 Each		
Red Lock*	A-Pack	1 Each		
Replacement Form*	A-Pack	1 Each		
Syringe 1 mL (with needle/Luer Lock)	Syringe 1 mL	5		
Syringe 5 mL	Syringe 5 mL	5		
Syringe 10 mL	Syringe 10 mL	5		
Syringe 20 mL	Syringe 10 mL	1		
Needle	18 g x 1.5 inch	3		
Pediatric Needle	25 g x 1 inch	2		
3 or 4 way Stopcock*		1 Each		
Syringe w/needle 3 mL – 21/22 g x 1.5 inch*	Syringe 3 mL A-Pack	5 2		

Replacing Hospital:

MCA Medical Director's Name or post radio ordering physician:

(Controlled Substance use only) **PRINT NAME**

Date:

PARAMEDIC'S STATEMENT

SEM EMS Medication Box number _____has been opened and the above noted medication(s) used as prescribed. I accept pharmacy sealed SEM EMS Medication Box Number _____ sealed with breakaway tag number

Paramedic Signature: Date:

RECEIVING PHARMACIST'S STATEMENT for RETURNED BOX

The controlled substance (C.S.) contents of the SEM EMS Medication Box number _____ has been reviewed. The Supply Use/Replacement form reflects the C.S. contents missing have been documented as administered by the Paramedic returning the box, C.S. contents not documented as administered are in the box in the correct concentration, dosage form, volume, and quantity per Medical Control Authority policy.

Name of Pharmacist on the Seal:

Name (Print)/Signature of Receiving Pharmacist:

Date: Hospital:

SEM A-PACK SUPPLY USE/REPLACEMENT FORM

Date: Agency Name: Unit #: Incident #:

Crew Names:

Replacing Hospital:

MEDICATION	UNIT/SIZE	QNTY	USED
Albuterol 2.5 mg/ 3 mL	Vial – UD 3 mL	6	
Aspirin 81 mg tablets	Chewable UD Tablets	4	
Dextrose 50% 25 g/50 mL	Syringe 50 mL	1	
Ipratropium Bromide 0.02% (In Baggie)	2.5 mL Vial – UD	1	
Naloxone 2 mg/2 mL or 0.4 mg/mL	2 x 2 mL Syringe or 1 x 10 mL Vial	4 mg	
Nitroglycerin 0.4 mg/tab	Bottle	1	
Ondansetron 2 mg/mL	2 mL Vial	2	
Ondansetron ODT	4mg Tablet	2	
Prednisone	50 mg Tablet	1	
Nebulizer		1	
Blunt Cannula	18 G x1 inch	2	
Intranasal Mucosal Atomization Device		1	
Syringe w/needle 3 mL x 21/22 G x 1.5 inch	Syringe 3 mL	2	
3 or 4-Way Stopcock		1	
Red Lock		1	
Replacement/Incident	Forms	1ea	

Paramedic's Statement

SEM EMS A-Pack #_____ has been opened and the noted medication(s) used as prescribed. I accept pharmacy sealed SEM EMS A-Pack #_____ sealed with breakaway # _____.

Patient Name: _____

Patient DOB: _____

Paramedic Signature: _____ Date: _____

Replacing Pharmacist's Statement

The medication(s) in the sealed SEM EMS A-Pack #_____has been distributed according to the Medication/Use and Replacement Policy of the participating MCA. All Medications are in the correct concentration, dosage, form, volume, amount, and not expired.

Signature of Replacing Pharmacist: _____

Hospital: _____ Date: _____