



GENERAL ORDER

GENERAL ORDER 320.18

EMS Standardized Inventories

EMERGENCY SERVICES BUREAU

Issue Date: January 16, 2018

Revision Date: N/A

1 APPLICABILITY

2 All operational personnel

3 POLICY

4 The Howard County Department of Fire and Rescue Services (Department) shall maintain an
5 EMS Standardized Inventory on all Department response-ready vehicles and in Howard County
6 facilities that house Department offices.

7
8 A Standardized Inventory directly benefits the provider and system managers and indirectly
9 enhances patient care. For system managers, it allows for predictable supply orders and cost
10 efficiency. Having set quantities and locations for supplies and equipment enhances provider
11 proficiency and accountability because the working environment is consistent, regardless of
12 where the provider reports to work. Together, this system enhances patient care delivery by
13 ensuring the correct amount and type of equipment is always present in a predictable location
14 when needed.

15
16 For primary emergency response apparatus, the standard is based on the Maryland Voluntary
17 Ambulance Inspection Program (VAIP) and augmented to fit the Department's needs. Other
18 emergency response vehicles are equipped for first response to incidents where they will be
19 quickly backed up by regularly dispatched crews.

20
21 It is understood that changes to apparatus, protocols, and EMS kits may occur at irregular
22 intervals. For this reason, this order establishes processes for implementation of changes to
23 the Standardized Inventories and establishes posting locations for reference of the "living"
24 inventory documents. It also establishes the procedures and accountability processes for day-
25 to-day operations.

26 DEFINITIONS

27 ➤ **Standardized Inventory:** An established amount and arrangement of equipment and
28 supplies for a designated piece of apparatus, jump kit or aid station.

29
30 ➤ **Primary Emergency Response Apparatus:** Any apparatus that would be normally
31 dispatched to an incident where EMS service is anticipated. Typically, these are station-
32 based front-line units (Ambulances, Engines, Special Services, supervisor/command
33 vehicles).

- 34 ➤ **Voluntary Ambulance Inspection Program (VAIP):** The MIEMSS biennial inspection
35 program. Establishes a state-wide standard inventory for EMS vehicles. Compliance with the
36 program provides a certification for our apparatus which has fiscal, legal, and regulatory
37 benefits.
38
- 39 ➤ **Durable Medical Equipment (DME):** Medical equipment that is reusable and not disposed
40 of after each call. Items such as backboards, traction splints, monitors and trauma shears
41 fall into this category.
42
- 43 ➤ **Supply Unit Vending System:** The vending machine style EMS supply dispenser at Howard
44 County General Hospital.

45 PROCEDURES

46 All operational personnel will check their assigned apparatus, using the established EMS
47 Standardized Inventories on a daily and weekly basis, at the beginning of each shift.
48 Completed monthly inventory checklists are to be turned in to the OIC and digitally filed for
49 accountability.

50
51 A monthly supply inventory shall be completed and forwarded to the Bureau of Logistics,
52 Supply Unit prior to the 15th of each month.

- 53 • It shall include replacement stock for items that expire during that month/beginning of
54 the following month. Unless an expiration date includes an exact day (ex. 09/1/2017),
55 the item is said to expire at the end of the month (ex. 09/2017 = 09/30/2017).
- 56 • Monthly EMS supply requisitions to the MDO follow the same timeline.
- 57 • Expiring stock is NOT to be replaced from any vending system locations.

58 59 **INVENTORY TYPES & LOCATIONS:**

60 EMS Standardized Inventories vary by apparatus type and response profile.

- 61 • Transport Units
 - 62 ○ All response ready ambulances in the Department are equipped for the
63 Advanced Life Support (ALS) level patient care.
- 64
- 65 • Suppression Units – Includes Engines, Trucks and Squads
 - 66 ○ Basic Life Support (BLS) – at a **minimum**, all suppression apparatus will be
67 stocked for patient care at the BLS level, as described in the EMS Standardized
68 Inventory for suppression apparatus.
 - 69 ○ ALS – All front-line engines will be stocked at the ALS level, as described in the
70 EMS Standardized Inventory for suppression apparatus. Any suppression
71 apparatus that is regularly staffed with an ALS provider or is designated as
72 “Paramedic” in staffing shall be ALS equipped.
- 73
- 74
- 75

- 76
- Medical Duty Officer Units
 - Stocked for ALS level care with the addition of specialty care items and limited supplies for restock of transport units.

77

78

79

 - Command, Staff, First Responder Vehicles
 - These vehicles are stocked to a minimum BLS level of care as described in the EMS Standardized Inventory for First Responder apparatus. First Responder vehicles may be stocked for ALS care as needed but are not intended for prolonged patient care.

80

81

82

83

84

85

 - The designated locations of EMS equipment are designed to allow for efficient access by the providers who will be providing care first, e.g., the primary firefighter or ambulance aid.

86

87

88

 - EMS kits and bags shall be standardized across all apparatus. The consistent color, style, and configuration of these “jump” kits assures the ability to standardize the location of its contents and weight which enhances patient care and reduces risk for the patient and providers.

89

90

91

92

 - The current EMS Standardized Inventories are posted on the Emergency Services Bureau page of the Department’s SizeUp website:
<https://hcdfrssizeup.howardcountymd.gov/?cat=14>. Digital copies are posted on the HCDFRS “T Drive”, located at T:\Fire\Forms\EMS Forms. Providers should always use the most recent version of the inventories, as posted in these locations.

93

94

95

96

97

98

99 **INVENTORY CHECKS & ACCOUNTABILITY:**

100 Personnel assigned to an apparatus are responsible for assuring the inventory and equipment checks are completed on a daily, weekly and monthly basis. Weekly and monthly checks should be a team effort. EMS inventory checks will be conducted using the posted Standardized Inventory for that apparatus and/or individual kit.

- Daily
 - At the beginning of each shift, providers will check their assigned apparatus for appropriate inventory stock and properly functioning equipment. The supplies and equipment shall match the amounts, types and placements of stock in the posted inventory for that vehicle/bag. The inventory checklist should be used as a reference, but does not need to be submitted.

104

105

106

107

108

109

110

- Weekly
 - On weekly apparatus checks, providers will open bags and bins containing EMS supplies and equipment to clean the containers and conduct a thorough inventory check. They will also operate all EMS DME to assure proper function. The appropriate EMS Standardized Inventory check-sheets shall be completed, *minus the expiration dates*, and submitted through the OIC in the same process as the monthly check.

111

112

113

114

115

116

117

118

- 119
- 120 • Monthly
 - 121 ○ On the weekly check for an apparatus that falls at the **beginning** of the month,
 - 122 providers shall examine all inventory items for that apparatus, conduct any
 - 123 monthly maintenance on DME and check stock for expiration dates.
 - 124 ▪ Stock that is expiring shall be removed and replaced with new stock.
 - 125 ▪ Stock that will expire at the end of the coming month will be noted and
 - 126 reported to the station EMS supply manager(s).
 - 127 • The expiring supplies will be ordered from the Supply Unit on a
 - 128 one-for-one basis.
 - 129 ▪ The monthly inventory check shall be conducted using the posted
 - 130 Standardized Inventory checklist.
 - 131 • The checklist can be completed digitally or on a printed hardcopy.
 - 132 • The completed checklist will be submitted to the OIC.
 - 133 • The OIC will maintain a digital file, for no less than six months, of
 - 134 all completed monthly inventory checks.
 - 135 • The digital file shall be kept in a Department network folder that is
 - 136 accessible to EMS command officers for accountability purposes.
 - 137 • The EMS Standardized Inventory forms are produced in a checklist
 - 138 format that is both printable and electronically fillable.
 - 139
 - 140 • Seals for bags/compartments
 - 141 ○ It is acceptable practice to seal a kit or compartment and use the seal number
 - 142 for accountability of the contents. This is useful for managing the infrequently
 - 143 used kit or compartment on certain units such as irregularly staffed BLS
 - 144 transports and utility vehicles. If a seal is used in place of a regular inventory
 - 145 check, the following shall apply:
 - 146 ▪ A running inventory, with expiration dates, must be maintained for each
 - 147 sealed item.
 - 148 ▪ A designated individual and a backup must be assigned to maintain the
 - 149 running inventories of the sealed items.
 - 150 ▪ When a seal is broken, the item shall be inventoried for completeness
 - 151 and resealed. The new seal number shall be placed on the running
 - 152 inventory.
 - 153 ▪ All sealed items will be opened and inventoried each month.
 - 154
 - 155 • EMS Standardized Inventories will be maintained and regulated by EMS Operations
 - 156 through the MDOs.
 - 157 ○ The inventories will be posted on the Department’s intranet (SizeUp) on the
 - 158 Emergency Services Bureau pages.
 - 159 ○ The living inventory documents will be maintained in the EMS
 - 160 Operations/Standardized Inventory file on a designated Department storage
 - 161 drive.

- 162 ○ Any changes to the EMS Standardized Inventories:
163 ▪ Will be reflected immediately online.
164 ▪ Will be communicated to the Department via Informational Bulletin,
165 email and Departmental intranet.
166

167 **ANCILLARY EMS EQUIPMENT STAGING AREAS:**

168 County buildings that house Department offices or personnel shall maintain an ancillary EMS
169 Equipment Staging Area that is stocked to the ALS level for purposes of EMS response on that
170 property, when needed. Only authorized, operational personnel should utilize this equipment
171 and all relevant documentation and reporting is required by the provider in charge of patient
172 care when this equipment is utilized.
173

174 **SUPPLY USAGE AND RESTOCK:**

- 175 ● Stock in the EMS kits should be maintained in accordance with the par levels on the EMS
176 Standardized Inventory lists. Overstock is costly and clutters the container which can
177 cause damage and make it difficult to find the item.
178 ● Expiring items shall be replaced through the Supply Unit. They should NOT be replaced
179 from the Supply Unit Vending System.
180 ● Items used for patient care shall be replaced in a one-for-one fashion after the incident.
181 These items should be replaced from the Supply Unit Vending System or MDO, when
182 applicable, or from station stock. EMS supplemental requests must pass through the
183 MDO for replacement medications.
184 ● DME shall be utilized and maintained in accordance with the manufacturer
185 recommendation unless specified by the Department (e.g. glucometer calibration
186 checks).
187

188 **EFFECTING CHANGE:**

- 189 ● Changes to an EMS Standardized Inventory must be approved by all stakeholders
190 (including the Emergency Services Bureau (ESB), Office of the Medical Director (OMD),
191 Bureau of Logistics (LOGS), and respective volunteer corporations) before
192 implementation. Requests for changes may be submitted using the “*Standardized*
193 *Medical Equipment Inventory: Request for Change*” form. The completed form is
194 submitted to ESB for review and processing.
195 ● The EMS Standardized Inventories are specifically designed to enhance a provider’s
196 ability to provide care. Provider input and change requests are strongly encouraged.
197 ● Submitted requests will follow the process outlined in *Attachment A*.
198 ● The standard for obtaining EMS supplies and equipment is through the Department’s
199 Bureau of Logistics Supply Unit. Any equipment or supplies obtained outside the
200 standard process shall comply with the EMS Standardized Inventory:
201 ○ Medications packaging (volume, concentration, package type) must be
202 consistent with the EMS Standardized Inventories.
203 ○ Supplies must match sizes & types supplied by the Department (bandage sizes,
204 endotracheal tubes, obstetrical kits, etc.).

- DME must be of the same manufacturer, model and accessories as supplied by the Department (cots, laryngoscopes, stair chairs).
- If the size, model, packaging, etc. is not specified in the EMS Standardized Inventory, deviation from the checklist is permitted. Any deviation should be coordinated through ESB and communicated to all operational personnel.

REFERENCES

- Maryland Voluntary Ambulance Inspection Program (VAIP) Standards

SUMMARY OF DOCUMENT CHANGES

New General Order

FORMS/ATTACHMENTS

- Attachment A: Request for Change Process/Form

APPROVED



John S. Butler, Fire Chief
Office of the Fire Chief

Author:



Richard Leonard, EMS Executive Captain
Emergency Services Bureau

Attachment A:



**Howard County Department
of Fire & Rescue**

**Standardized EMS Inventory
Request for Change**

<i>Individual requesting change</i>	<i>Station</i>	<i>Shift</i>	<i>Date Submitted to MDO</i>
-------------------------------------	----------------	--------------	------------------------------

Requesting change for the following medical equipment inventory:

<input type="checkbox"/> ALS transport vehicle fixed inventory	<input type="checkbox"/> Advanced Procedures bag	<input type="checkbox"/> Oxygen / First Responder bag
<input type="checkbox"/> Advanced Airway bag	<input type="checkbox"/> Pediatric bag	<input type="checkbox"/> Lifepack 15 Cardiac Monitor
<input type="checkbox"/> Spinal Immobilization Kit	<input type="checkbox"/> Trauma bag	<input type="checkbox"/> Triage Kit
<input type="checkbox"/> Other: _____		

Requesting the following type of change

<input type="checkbox"/> Change minimum quantity	<input type="checkbox"/> Change maximum quantity	<input type="checkbox"/> Change of item type/size/etc.
<input type="checkbox"/> Change of item location	<input type="checkbox"/> Add Item	<input type="checkbox"/> Delete Item
<input type="checkbox"/> Other: _____		

Requesting change regarding the following item as it appears in the standardized inventory

<i>Min</i>	<i>Max</i>	<i>Item</i>	<i>Comment</i>

Requesting change to read as follows

<i>Min</i>	<i>Max</i>	<i>Item</i>	<i>Comment</i>

Rationale for change

<i>Submitted to:</i>	<i>Date Submitted</i>
----------------------	-----------------------