



# Carroll County Department of Fire & EMS

## Standard Operating Procedure

### DOCUMENT DETAILS

<b>Standard Operating Procedure: 3.03</b>	<b>Effective Date: June 8, 2023</b>
<b>Subject: ALS Controlled Substances</b>	<b>Section: Emergency Medical Services</b>
<b>Authorized: Eric Zaney, Assistant Chief</b>	<b>Revision Date: March 19, 2025</b>

**Applicability:**      ☒ Volunteer      ☒ Career

### I. PURPOSE

The Carroll County Department of Fire and EMS (DFEMS) is mandated by the Comprehensive Drug Abuse Prevention and Control Act of 1970 (otherwise known as Controlled Substance Act), to maintain security of controlled substances. Any Fire/Emergency Medical Services (EMS) Department unit that has assigned controlled substances shall adhere to this policy.

### II. DEFINITIONS

**ALS Clinician:** The sole clinician that will be accepting, maintaining, and giving up custody of narcotics.

**Controlled Substance:** A drug or chemical substance whose possession and use are regulated under the Controlled Substance Act.

**Control Number:** A unique identifying number assigned to a container of medication for the purpose of tracking.

**Daily Log:** A daily log accessed via QR coding of all controlled substances that shall be accounted for and documented.

**ePCR:** Electronic Patient Care Report used by DFEMS to document patient care.  
Assistant Chief of EMS - The Career EMS officer responsible for all EMS related issues.

**DEA:** United States Drug Enforcement Administration.

**Face-to-Face Controlled Substance Transfer of Custody:** The direct contact and presence of both the off-going and on-coming ALS clinician assigned to the unit and/or station. During the transitioning of custody of the controlled substances, the date, time, medication seal color and number, unit, station and clinician shall be documented and placed in the controlled substance log(s).

**Jurisdictional Medical Director - Physician** contracted by the County pursuant to the requirements of COMAR Title 30 Emergency Medical Services Operational Program and the Controlled Substance Act.

The Jurisdictional Medical Director provides the prescription and receives the DEA authorization for the department to purchase controlled substances.

**Med Vault:** The storage system used by the DFEMS to store controlled substances that are required to be securely locked in a substantially constructed cabinet that complies with 21CFR 1301.75- Physical Security Controls for Partitioners.

**Med Vault Personal Identification Number (PIN):** Unique 6-digit number used specifically for accessing the Med Vault storage safe to be kept secure and confidential by the provider.

**Shift Commander:** The highest ranking DFEMS staff member working who is responsible for shift duties.

### III. PROCEDURES

#### A. General

1. The Department of Justice, specifically the Drug Enforcement Administration, is responsible for the enforcement of the Controlled Substances Act. The Controlled Substances Act requires "all persons who manufacture, distribute or dispense any controlled drug provide effective controls and procedures to guard against theft and diversion of controlled substances." The Act further requires "all persons who manufacture, distribute or dispense any controlled drug keep inventories and maintain complete and accurate records of all drugs manufactured, dispensed, obtained, or disposed of." The Fire & EMS Department and all affiliated EMS providers fall under this law and are subject to its requirements.
2. This policy identifies the electronic process to track a controlled substance from the receipt into DFEMS until administration, waste, or disposal.
3. This policy applies to all medications designated in the schedule of addictive medications ("schedule") by the Controlled Substances Act. The Maryland Medical Protocol for Emergency Medical Service Providers allows for the use of the following scheduled drugs:
  - a. Schedule II - drugs available only by prescription and distribution is carefully controlled and monitored by the DEA.
    - i. The drug or other substance has a high potential for abuse.
    - ii. The drug or other substance has a currently accepted medical use in treatment in the United States or a currently accepted medical use with severe restrictions.
    - iii. Abuse of the drug or other substances may lead to severe psychological or physical dependence.
  - b. Schedule III - drugs available only by prescription, and distribution is carefully controlled and monitored by the DEA.
    - i. The drug or other substance has a potential for abuse, less than drugs or substances in schedules I and II.
    - ii. The drug or other substance has a currently accepted medical use in treatment in the United States.

- c. Schedule IV - drugs available only by prescription, though control of wholesale distribution is less stringent than Schedule II drugs.
  - i. The drug or other substance has a potential for abuse less than the drugs or other substances in schedules I, II, and III.
  - ii. The drug or other substance has a currently accepted medical use in treatment in the United States.
  - iii. Abuse of the drug or other substance may lead to moderate or low physical dependence or high psychological dependence.
  - iv. These drugs are carried in a prescribed method to reduce the potential for medication dosage errors and tampering. Controlled substances carried on Carroll County Department of Fire and EMS units will be in a concentration as determined by the Jurisdictional Medical Director and supplied ONLY by the Department. Under no circumstances should controlled substances be accepted from any other source, absent permission from the Director/Fire EMS Chief or his designee.
  - v. In all cases, the drug packaging must provide a tamper evident seal to show if someone has accessed the drug. If the seal is broken or missing, the drug should not be used in patient care and should be reported to the Shift Commander and documented as described below in this Policy.

## B. Narcotic Storage

### 1. Assistant Chief of EMS

- a. The Department's stock supply of controlled substances will be stored in accordance with applicable state and federal laws and regulations.
- b. The stock supply shall be stored in a secure safe / med vault with only the Assistant Chief of EMS and Shift Commanders having access.
- c. The Assistant Chief of EMS will authorize the distribution of controlled substances to the Shift Commanders and ALS chase cars on an as needed basis.
- d. The Assistant Chief of EMS will ensure the Med Vault access PIN numbers are issued to all licensed and jurisdictionally approved Advanced Life Support Providers as approved by the Jurisdictional Medical Director.
- e. The Assistant Chief of EMS will ensure all controlled medications are properly sealed prior to distribution.

### 2. ALS Transport Units and Volunteer Chase Cars

- a. Controlled substances shall be stored in accordance with all applicable state and federal laws and regulations in a Med Vault storage unit with a quantity as determined by DFEMS.

### 3. Shift Commanders and Career Chase Cars

- a. Controlled substances shall be stored in accordance with all applicable state and federal laws and regulations in a Med Vault storage unit with a quantity as determined by DFEMS.

- b. Shift Commanders and ALS Chase cars shall carry additional narcotics to allow for restocking of ALS transport units and Chase Cars with a quantity determined by DFEMS.
- 4. Satellite Station Narcotic Medication Storage
  - a. Each station where a career ALS Chase Car has been assigned full-time will maintain a restock supply of controlled substances stored in accordance with all applicable state and federal laws and regulations.
  - b. The station stock of controlled substances shall be stored in a secure safe / medication vault housed within the station. Only the Assistant Chief of EMS, Shift Commanders and specifically designated career ALS Clinicians shall be granted access.
  - c. The Station supply of controlled substances shall be used by the ALS Chase Car clinician to resupply any depleted kits returned from Their respective battalions transport units.
  - d. All resupply and restock activities require that 2- ALS clinicians be present and both clinicians must verify the controlled substance counts pre and post restock. This information shall be documented in the appropriate restock tracking log.
  - e. A monthly medication storage inventory will be conducted on the first day of each month of all satellite stored CDS. Once completed the inventory shall be forwarded to the Assistant Chief of EMS for review.

#### C. Acquisition of Narcotics

- 1. Narcotics are ordered through the County's designated vendor(s) by the Assistant Chief of EMS utilizing the Jurisdictional Medical Director's DEA authorization number.
- 2. Upon receiving controlled substances, the Assistant Chief of EMS must add the controlled substance to the Narcotics tracking database logging the quantity, LOT number and expiration date of each vial. Another ALS provider, preferably a Shift Commander or ALS Chase medic, will confirm the amount added to the Med Vault and verify the tracking database is updated.
- 3. The Assistant Chief of EMS shall authorize the distribution of controlled substances to Shift Commanders and Career ALS Chase Cars. All controlled substance logs will be updated to reflect any changes.
- 4. The Assistant Chief of EMS, Shift Commander, or Career ALS Chase Medic shall distribute controlled substances to ALS transport units and Volunteer ALS Chase Cars on an as needed basis.
  - a. When transferring controlled substances from one unit to another, the addition or removal of controlled substances shall be entered into the appropriate controlled substance log.
- 5. Expired controlled substances shall be replaced on a one for one basis by the Assistant Chief of EMS or their designee and recorded in the appropriate controlled substance log.
- 6. Controlled substances will be placed into a sealed box for distribution to each unit.
  - a. A serial numbered green tag will be affixed to the box if it contains the maximum quantity of controlled substance.
  - b. A serial numbered yellow tag will be affixed to the box if a controlled

substance is on shortage and limited replacements exist.

- c. A serial numbered red tag will be affixed to the box if a controlled substance has been used and is below the minimum established quantity.

#### D. Custody of Controlled Substances

1. Custody of all controlled substances will be maintained by the Advanced Life Support Clinician assigned to each unit or in the event of multiple units the assigned station.
  - a. If a unit is staffed to the ALS level the ALS clinician on-duty at the station will verify the integrity of all controlled substances on the unit and enter the appropriate information into the log. If no ALS clinician is on-duty at the station the EMS Battalion Chase Car shall conduct the verification.
  - b. If a unit is understaffed, reserve status or out of service in quarters the ALS clinician on-duty at the station will verify the integrity of all controlled substances on the unit and enter the appropriate information into the log. If no ALS clinician is on-duty at the station the EMS Battalion Chase Car shall conduct the verification.
  - c. If a unit is staffed to the BLS level and no ALS clinician is assigned to the station the EMS Battalion Chase Car shall conduct the verification and enter the appropriate information into the log.
2. When the custody of controlled substances is transferred, the ALS clinician receiving the controlled substances shall enter the information into the controlled substance log via the QR code. The ALS clinician transferring custody shall be physically present and will visually verify the integrity of all seals affixed to each controlled substance.
3. The transfer of custody is a face-to-face verification process (transfer and receipt of controlled substances) that occurs daily at 0700 hours and whenever there is an ALS clinician change. At a minimum all narcotic logs must be updated at least once daily.
  - a. The ALS clinician receiving transfer (On-Coming) of the controlled substances shall scan the QR code attached to the unit's medication vault. The clinician will enter the date, their name, station, unit, kit number, seal number and color. The ALS clinician transferring custody (Off-Going) shall be physically present and must verify the transfer.
  - b. If a unit is staffed to the BLS level it will be the responsibility of the on-duty ALS clinician assigned to the station to ensure the units-controlled substances are verified daily. If there is not an ALS clinician to accept custody of the controlled substances at a station, the Career Battalion ALS Chase Car or Shift Commander shall conduct the Verification and enter the appropriate information into the controlled substance log for that day.
  - c. If a unit is dispatched to an emergency incident prior to the transfer of custody, the ALS clinician accepting the controlled substances must immediately, upon returning from the call, verify and complete the appropriate log. Any discrepancies shall immediately be reported to the station officer (if applicable), Battalion Career ALS Chase Medic and the on-duty Shift Commander.
  - d. Once custody is accepted, the ALS clinician accepting custody is

responsible for maintaining the security of the controlled substances until custody is transferred again, as outlined above.

- e. At no time will the transfer of controlled substances occur during an incident if there will be any delay in patient care or transport. Transfer shall only occur after the completion of an incident.

#### E. Restock / Resupply of Controlled Substance Kits

1. It is the responsibility of each ALS clinician assigned to an ALS transport unit / station to notify the battalion EMS chase car when controlled substances have been utilized and require restocking.
2. It will be the responsibility of each battalion EMS chase car to coordinate restock and resupply of controlled substances to ALS transport units within their respective battalion.
3. All red tagged CDS storage kits will be inventoried by the assigned battalion EMS Chase Car and all used medications replaced 1:1. The EMS chase car will complete a full inventory of the red tagged kit, resupply it as needed from the restock supply, affix a new green tag and update the narcotics log(s) as required. All expiration dates will be verified during the restocking process.
4. The restocked and green tagged kit will be placed back into field rotation.
5. If prior to restock a red tagged kit is used by a transport unit the ALS clinician accessing the kit and / or administering the medication(s) will follow the same procedure for documentation found under the administration section. Upon completion the kit will have a new red tag affixed and serial number recorded using the QR code process.

#### F. Controlled Substance Administration/Waste

1. The primary ALS Clinician administering the controlled substance, shall scan the QR code attached to the CDS storage box. The clinician shall enter the following information into the log: Date, Incident #, Patient last name, Unit, CDS box number used, seal number and color removed, clinician name who administered the medication, select the name of the medication administered, dose administered and if applicable dose wasted with a witness name, and the seal color and serial number replaced on the storage box. If multiple controlled substances were administered the clinician shall again scan the storage box QR code and complete the same information for each additional controlled medication that was administered.
2. The primary ALS Clinician administering/wasting the controlled substance, shall enter into eMeds the controlled substance used in the medication drop down box under clinician actions. The ALS clinicians shall complete the controlled substances tab under the signatures section to include the following: Medication name, units of measure (mcg/mg), amount taken (CDS box number), amount administered, amount wasted if applicable, broken seal color and number and new seal color and number. If multiple controlled substances were administered the clinician shall select “add another” and complete the same information for each additional controlled medication that was administered.
3. All Controlled substance waste shall be witnessed, verified and documented with

another EMS Clinician present. A BLS Clinician may sign as a witness if another ALS clinician is not available. Hospital staff will not be requested to witness any EMS controlled substance waste.

1. If controlled substances are administered and/or wasted and the patient is either not transported or the ALS Clinician administering the medication does not transport the patient to a receiving hospital, the administering ALS Clinician shall have another EMS Clinician on scene verify the amount used and if appropriate wasted. This information shall be included in both the eMeds report and usage log as above.
2. Disposal and waste of controlled substances shall be conducted by drawing the medication to be wasted into a syringe and the waste medication discharged into a sink with the witness present. Vials filled or partially filled, with controlled substances shall NOT be discarded into a sharps container without wasting the controlled substance first.
3. Any vials that are expired or not suitable for patient administration shall be returned to the Assistant Chief of EMS or designee for proper disposal.

#### G. Lost, Stolen, or Damaged Controlled Substances

1. Once any discrepancy is noted with the controlled substance on a unit or if a vial appears tampered with, damaged or missing, the unit shall be placed out of service immediately.
2. The Station officer (if applicable), On-duty Shift Commander and Assistant Chief of EMS shall be notified immediately.
3. If a controlled substance is lost or stolen, a police report shall be completed, and an investigation initiated by the Assistant Chief of EMS.
4. Written documentation shall be completed by the ALS Clinician that discovered the issue and submitted to the Shift Commander and Assistant Chief of EMS. Any witnesses present may be required to submit a witness statement at the discretion of the Assistant Chief of EMS or the Police agency investigating the incident. All clinicians are required to fully cooperate with any CDS investigation and submit to all requests for documentation of any CDS related issue. A failure to comply may result in disciplinary action.
5. Clinicians who had access to or custody of the controlled substance may be required to submit to an immediate “with cause” drug screening.

## IV. RESCISION

This Standard Operating Procedure rescinds all directives regarding ALS Controlled Substances or similar content previously issued for personnel of the Carroll County Department of Fire & EMS.

## V. RELATED STANDARD OPERATING PROCEDURES / DOCUMENTS

### **Controlled Substance (CDS) Minimum and Maximum Quantities**

ALS TRANSPORT UNITS Per Unit = 2 Transport Unit Storage Kits		
Medication	Minimum	Maximum
Fentanyl	400 mcg	800 mcg
Midazolam	20 mg	40 mg
Ketamine (Low Concentration) 10 mg/ml	400 mg	800 mg

ALS CHASE CARS per Unit = 1 Chase Car Kit and 2 Transport Unit Kits (Restock)		
Medication	Minimum	Maximum
Fentanyl	400 mcg	1000 mcg
Midazolam	20 mg	600 mg
Ketamine IV/IO (Low Concentration) 10 mg/ml	400 mg	1200 mg
Ketamine IM/IN (High Concentration) 100 mg/ml	500 mg	1000 mg

### **TRANSPORT UNIT - Controlled Substance (CDS) Individual Storage Kit Quantities**

ALS TRANSPORT UNIT KIT		
Medication	Minimum	Maximum
Fentanyl	400 mcg	400 mcg
Midazolam	20 mg	20 mg
Ketamine IV/IO (Low Concentration) 10 mg/ml	400 mg	400 mg

### **CHASE CAR - Controlled Substance (CDS) Individual Storage Kit Quantities**

ALS CHASE CAR KIT		
Medication	Minimum	Maximum
Fentanyl	400 mcg	400 mcg
Midazolam	20 mg	20 mg
Ketamine IV/IO (Low Concentration) 10 mg/ml	400 mg	400 mg
Ketamine IM/IN (High Concentration) 100 mg/ml	500 mg	500 mg

### **Satellite Station (CDS) Storage** – Attachment

Each station housing an ALS Chase Car will be equipped with a satellite narcotic storage vault the satellite station vault shall be kept locked and always secured and installed in a location that is protected from public



access. Satellite station storage shall be used by the Chase Car Medic for resupply and restock of their respective Battalion assigned EMS transport units.

EMS 101 (Manchester Station) - Manchester, Hampstead, Lineboro, Westminster  
EMS 102 (Taneytown Station) - Taneytown, Union Bridge, Pleasant Valley, New Windsor  
EMS 103 (Winfield Station) - Winfield, Gamber, Sykesville, Mount Airy

Medication	Minimum	Maximum
Fentanyl	500 mcg	1000 mcg
Midazolam	40 mg	80 mg
Ketamine (Low Dose) 10 mg/ml	800 mg	1600 mg
Ketamine (High Concentration) 100 mg/ml	500 mg	1000 mg

## VI. ATTACHMENTS

None