V. TACTICAL EMS

1. INTRODUCTION

a) Scope and Applicability

(1) These protocols are intended for use during high-risk, large-scale, and extended law enforcement or homeland security operations.

(2) The Tactical Emergency Medical Services (TEMS) clinician is not directly responsible for any person(s) outside the direct field of operations, whose care may safely be provided by the local EMS Operational Program.

(3) These protocols supplement the current version of *Maryland Medical Protocols for Emergency Medical Services* and, at the Tactical Physician's discretion, may incorporate other EMS protocol components such as: Wilderness, Interfacility, Pilot/Optional, and WMD sections.

(4) The Tactical Emergency Medical Services Protocols shall be used only by Tactical EMS clinicians sponsored by a law enforcement agency and operating under law enforcement command.

(5) To be approved, there must be a written, integrated relationship between the EMS Operational Program and the TEMS program, with both the EMS Operational Program Medical Director and the TEMS Medical Director having signed off on the agreement.

(6) Tactical EMS Clinicians at the EMT or ALS levels may administer the medications and perform the procedures listed in these protocols only after receiving specific training on their use and only under the medical direction of a Tactical Physician.

(7) The primary function of the Tactical EMS Clinician is to support law enforcement or homeland security operations by facilitating the health and safety of critical public safety personnel inside the perimeter of high-risk, large-scale, and extended operations.

(8) Once the patient is removed from the law enforcement perimeter of operations, the TEMS Protocol will end, *The Maryland Medical Protocols for Emergency Medical Services* will be implemented, and the transition of care will be made to the local EMS agency.

(9) An exception may be made when the Tactical EMS Clinician's specialized training is needed to manage a specific illness/injury.

(a) If the Tactical EMS Clinician's specialized training is needed to manage the patient's illness/injury, then the highest-trained Tactical EMS Clinician shall ride to the hospital with the patient to maintain medications that are not allowed by *The Maryland Medical Protocols for Emergency Medical Services*.

(b) If, during transport, Tactical EMS personnel encounter a significant conflict between TEMS Protocols and those of the transporting EMS agency, they should attempt to contact their own Tactical Physician and request a dual consult with the local Base Station Physician.

(c) If they cannot reach a Tactical Physician, they should contact the local EMS Base Station for on-line medical consultation.

b) Definition of Tactical Environment
   (1) Any law enforcement or homeland security operation where deployed personnel are in a large-scale operation or where the risk of injury is sufficiently high as to warrant the presence of on-scene emergency medical services clinicians.
   (2) Types of operations may include: high-risk warrant service, hostage-barricade situations, emergency ordinance disposal, executive protection details, civil demonstration or protest, dynamic training operations, aquatic operations, high-angle, search and rescue missions, and acts of terrorism.
   (3) Any prolonged law enforcement deployment, where performance decrement or environmental issues may arise and the safety of the public and deployed law enforcement personnel would benefit from the presence of a Tactical EMS Clinician to monitor these circumstances.

c) Demonstration of Need
   (1) Jurisdictions that seek approval for a Tactical EMS Program shall submit a demonstration-of-need letter outlining the necessity for the program.
   (2) The letter shall be submitted to the State EMS Medical Director for approval and include the following:
      (a) Name of organization and scope of the proposed Tactical EMS Team
      (b) Name and qualifications of the Tactical Medical Director and other Tactical Physicians
      (c) Name and qualifications of the Tactical EMS Coordinator and other Tactical EMS Clinicians

d) Sponsoring Law Enforcement Agency Requirements
   (1) Sponsoring Law Enforcement Agencies shall be responsible for
      (a) Completing background investigations appropriate for medical clinicians working in and around law enforcement operations
      (b) Providing appropriate personal protective equipment, to accommodate conditions that the team may reasonably encounter, to the Tactical EMS Clinicians and Tactical Physician(s) and ensure adequate training in the equipment's use and capabilities
      (c) Providing written documentation to MIEMSS that addresses the medical liability and personal injury considerations of the Tactical EMS Clinicians/Physician(s)

e) Tactical EMS Clinician/Tactical Physician Minimum Training Requirements
   (1) The Tactical EMS Clinician shall be a Maryland-certified EMT or Maryland-licensed ALS clinician and have successfully completed a nationally-recognized Counter-Narcotic Tactical Operation Medical Support/Integrated Force Health Clinician Program (CONTOMS/IFHP) or equivalent Tactical Clinician course that includes instruction and training in
      (a) Team wellness and health management, including preventive medicine
      (b) Providing care under fire/basic weapons safety
      (c) Officer rescue
      (d) Planning medical operations and medical intelligence
      (e) Response to the active shooter

(f) Orientation to specialized medical gear personal protective equipment used in tactical medical operations
(g) Remote medical assessment ("medicine across the barricade")
(h) Response and management of WMD events, including field-expedient decontamination ("hasty decon") procedures
(i) Operational security, light and sound discipline, helicopter operations, pyrotechnic and other chemical agents, as utilized by law enforcement teams
(j) Less-than-lethal weaponry, the injuries they may cause, and any specific interventions required

(2) The Tactical EMS Clinician shall have responsibilities for part or all of these protocols, as summarized as follows, based on either EMT or ALS (CRT-I or paramedic) level certification.

INTERVENTION	EMT	ALS
Provision of access to medications: ibuprofen, naproxen, fexofenadine, cetirizine, pseudoephedrine, oxymetazoline nasal spray, Mylanta®, cimetidine, loperamide, clove oil, acetaminophen, tramadol, caffeine, modafinil, ondansetron ODT, scopolamine patch, ophthalmologic proparacaine/tetracaine and fluorescein, prednisone PO, dexamethasone PO, albuterol MDI, aspirin, epinephrine 1 mg/mL IM, naloxone IN, glucose PO	•	•
Administration of medications in Protocol, not listed above		•
Cyanoacrylate tissue adhesive	•	•
Field expedient wound closure (stapling)		•
Conducted electrical weapon (CEW) dart removal	•	•

(3) The Tactical EMS Clinician shall document each patient contact utilizing a patient care report (PCR) (eMEDS®). The documentation must be consistent with current MIEMSS regulations for interventions, as summarized in the above table.
(4) The Tactical Physician shall possess an unrestricted Maryland License (preferred Emergency Medicine, General/Orthopedic/Trauma Surgery, or Critical Care), have experience in on-line medical direction, and have completed a nationally-recognized (CONTOMS/IFHP or equivalent) tactical medical director's course that includes instruction and training in the following topics:
(a) History of/need for tactical EMS provision
(b) Administrative/command concerns and responsibilities
(c) Care under fire
(d) Special equipment/hazards in the tactical environment
(e) Forensic examination
(f) Medicine "across the barricade"
(g) Medical threat assessment

f) Quality Assurance Properties
   (1) Individual Tactical EMS Clinicians must be approved for TEMS Program Participation by the TEMS Medical Director.
   (2) Classroom lecture
   (3) Mannequin instruction
   (4) Must demonstrate proficiency through skills testing and written test
   (5) Ongoing demonstration of proficiency
   (6) A verification of all TEMS skills and review of TEMS principles of safety will be performed on an annual basis by the Medical Director, or the clinician may document utilization of skills in the field
   (7) Review of each call
      (a) Upon completion of the tactical incident, notification of any implementation of the TEMS Protocol will be made to your jurisdictional TEMS supervisor, who will ensure notification to TEMS Medical Director.
      (b) TEMS Medical Director will review and evaluate all TEMS interventions within 48 hours of resolution of the tactical incident and provide feedback.
   (8) The TEMS program will maintain a detailed TEMS database and will provide an annual report to the State EMS Medical Director.

2. GENERAL PROTOCOLS

a) Medical Direction
   (1) Tactical EMS Clinicians may provide medical care using Tactical Medical Protocols only under the medical direction of a Tactical Physician.
   (2) Immediately available telephone or radio contact during an operation shall be considered a reasonable substitute for in-person supervision of Tactical EMS Clinicians.
   (3) In the absence of medical direction by a Tactical Physician, jurisdictional trained and designated Tactical EMS Clinicians should defer to their usual EMS protocols.

b) Operational Command
   (1) Operational command within a law enforcement perimeter of operation lies with the law enforcement commander. At times, the safety and success of the law enforcement objectives may override the need to care for casualties. The law enforcement commander is responsible for the care and movement of casualties within a law enforcement operation.

3. SPECIAL CONSIDERATION FOR TACTICAL EMS

a) The execution of some law enforcement operations may require that minor illness or injury in essential public safety personnel be treated and, to the extent that it is medically safe to do so, that those treated personnel return to duty. Fitness for duty of public safety personnel with minor injuries or illnesses shall be determined by the law enforcement commander in consultation with a Tactical Physician.

b) Prescription and over-the-counter (OTC) medications may be used for the treatment (or “symptomatic relief”) of constitutional symptoms as required

to promote the health, safety, and functionality of persons necessary to the operation. The Tactical EMS Clinician(s) under the Tactical Physician will know the indications/contraindications for the medications available to them (as will be delineated under "Additional Medications for Tactical EMS," to follow). At the EMT level, medications will be made available to those persons under the Tactical Clinician's care to self-select and self-medicate at the individual requesting person's own discretion regarding appropriateness of use.

c) The Tactical EMS Clinician may provide care to all persons associated with the operation, and shall be responsible for initial access, assessment, and stabilization (within the scope of *The Maryland Medical Protocols for Emergency Medical Services*) of those victims, bystanders, and suspects within the "warm" or "hot" zones until they may be extracted to local EMS clinicians. The Tactical EMS clinician is not directly responsible for any person(s) outside the direct field of operations, whose care may safely be provided by the local EMS Operational Program.

4. SPECIFIC PROCEDURES

a) Cyanoacrylate tissue adhesive
   (1) Purpose: To limit blood loss, pain, and risk of secondary contamination/injury to a minor open wound
   (2) Indications
      (a) Clean wounds
      (b) Minor bleeding wounds difficult to control with other interventions
      (c) Wounds in personnel who must remain operational
   (3) Contraindications
      (a) Grossly contaminated wounds
      (b) Greater than two hours since infliction of wound
      (c) Macerated/crushed surrounding tissue
      (d) Wounds near the eyes
   (4) Potential adverse effects/complications
      (a) This is not intended to constitute definitive wound closure; however, if properly cleaned prior to procedure, may be reviewed by physician without further intervention.
      (b) Transient local pain at application site may be reported.
   (5) Precautions
      (a) Ask regarding previous reaction/exposure to agent.
      (b) Advise patient of requirement for further evaluation by physician.

b) "Field expedient" wound closure (stapling)
   (1) Purpose: To limit blood loss and risk of secondary contamination injury to an open wound.
   (2) Indications
      (a) Clean wounds
      (b) Delay in transportation to definitive care will be or is anticipated to be several hours
      (c) Bleeding wounds difficult to control with other interventions
      (d) Wounds in personnel who must remain operational

(3) Contraindications
  (a) Grossly contaminated wounds
  (b) Greater than six hours since infliction of wound
  (c) Macerated/crushed surrounding tissue
  (d) Situations with less than two hours anticipated time to transportation to definitive care
  (e) Facial wounds
(4) Potential adverse effects/complications
  (a) This is not intended to constitute definitive wound closure—this will minimize the risk for increased infection and increased foreign body retention.
(5) Precautions
  (a) Ask regarding local anesthetic allergies.
  (b) Advise patient of requirement for further evaluation by physician.

c) Impaled conducted electrical weapon dart removal
(1) ANY conducted electrical weapon dart impalement to the head, neck, hands, feet, or genitalia must be stabilized in place and evaluated by a physician.
(2) In order to safely transport the patient, attempted extraction may be made one time by a Tactical EMS Clinician as long as the dart is not lodged in a location listed in (1) above and is not fully embedded up to the hub in tissue.
(3) All patients receiving conducted electrical weapon intervention will need to be transported to the emergency department for assessment.

5. SUPPLEMENTAL FORMULARY FOR TACTICAL EMS

a) Tactical EMS clinicians may administer the following medications to support and maintain Tactical personnel in the operation environment. Bolded medications are required as part of the standardized TEMS load-out at the EMT or ALS level; the others are optional.
(1) Antihistamines/Decongestants
  (a) Pseudoephedrine (Sudafed®)
  (b) Cetirizine (Zyrtec®)
  (c) Diphenhydramine (Benadryl®)
  (d) Fexofenadine (Allegra®)
  (e) Oxymetazoline nasal spray (Afrin®)
(2) Gastrointestinal
  (a) Antacid (Mylanta® or other equivalent antacid)
  (b) Cimetidine (Tagamet®—or other equivalent H2 blocker)
  (c) Loperamide (Imodium®)
  (d) 5-HT3 Antagonist (Zofran® ODT/Ondansetron, 5-HT3 antagonist)
  (e) Metoclopramide (Reglan®) (injectable)
  (f) Dimenhydrinate (Dramamine®)
  (g) Meclizine (Antivert®) (for motion sickness)
  (h) Scopolamine transdermal

(3) Opthalmologicals
- **(a) Proparacaine or tetracaine (Alcaine®) ophthetic**
- **(b) Fluorescein stain (and blue light)**
- **(c) Eye irrigation solution**
- **(d) Erythromycin ophthalmic ointment**
- **(e) pH paper**

(4) Antimicrobials/antiviral (agent-specific training)
- **(a) Ciprofloxacin (following exposure or prophylaxis)**
- **(b) Triple Antibiotic Ointment (Bacitracin®/Polymyxin®/Neomycin®)**
- (c) Amoxicillin/clavualic acid (Augmentin®)
- (d) Cefazolin (Ancef®) (PO or IV) (for trauma applications when transport delayed)
- (e) Clindamycin (Cleocin®)
- (f) Trimethoprim/sulfamethoxazole (Bactrim®)
- (g) Azithromycin (Zithromax®)
- (h) Doxycycline
- (i) Mupirocin topical ointment (Bactroban®)
- (j) Emtricitabine and tenofovir (Truvada®) (high-risk post-exposure management)

(5) Steroids
- **(a) Prednisone (PO)**
- (b) Dexamethasone (Decadron®) (IV/IM and/or PO)

(6) Analgesics/anesthetics
- **(a) Acetaminophen (PO)**
- **(b) Ibuprofen (Motrin®/Advil®)**
- **(c) Naproxen (Aleve®/Naprosyn®) (PO)**
- **(d) Tramadol (Ultram®) (PO)**
- **(e) Ketamine**
- **(f) Naloxone (Narcan®) (IN and/or IV)**
- (g) Lidocaine (transdermal for muscular relief, or IM/SQ for stapling as temporizing measure only, alternate dosing regimen)
- (h) Fentanyl transmucosal (PO)
- (i) Clove oil (for topical dental analgesia)
- (j) Ketorolac (Toradol®) (injectable)

(7) Sleep/wake
- **(a) Caffeine (No-Doz®)**
- (b) Zaleplon (Sonata®) (sleeper)
- (c) Modafinil (Provigil®)

(8) Wound management
- **(a) Cyanoacrylate tissue adhesive (Dermabond®)**
- **(b) Topical hemostatic agent**
- **(c) Steri-strips**
- (d) Staples

(9) ACLS/resuscitation
- **(a) Albuterol MDI**

(10) Anti-hypoglycemics
(a) Oral glucose

(11) Additional Medications for Tactical EMS: The following is a list of medications from the Maryland Medical Protocols that is strongly encouraged to be readily accessible to complement the Tactical Medic's Formulary.

Aspirin (EMT, ALS)..... Non-Operational
Atropine multi-dose (ALS)..... Non-Operational
Dexamethasone (ALS).....Operational
Dextrose (ALS)..... Non-Operational
Epinephrine 1:1,000, (EMT, ALS)..... Non-Operational
Haldol (ALS)..... Non-Operational
Morphine or fentanyl for injection (ALS)..... Non-Operational
Midazolam (ALS)..... Non-Operational
Nitroglycerin (ALS)..... Non-Operational

OPERATIONAL: THE MEDICATION MAY BE GIVEN TO A LAW ENFORCEMENT MEMBER WHO MAY CONTINUE TO PERFORM THEIR ASSIGNED DUTIES.

NON-OPERATIONAL: ONCE THE MEDICATION HAS BEEN ADMINISTERED, THE LAW ENFORCEMENT MEMBER IS REMOVED FROM THEIR ASSIGNED DUTIES SINCE THE MEDICATION OR THE ASSOCIATED MEDICAL/TRAUMATIC COMPLAINT FOR WHICH THE MEDICATION IS INDICATED MAY IMPAIR THEIR ABILITY TO PERFORM CRITICAL LAW ENFORCEMENT TASKS AND DUTIES.

b) Tactical EMS Medical Formulary

(1) Antihistamines/Decongestants

(a) Pseudoephedrine (Sudafed®)

(i) AVAILABILITY.....30 mg or 60 mg tablets (OTC)
(ii) ACTION.....Decongestant
(iii) INDICATIONS.....Nasal congestion; rhinorrhea
(iv) CONTRAINDICATIONS.....Known hypersensitivity; hypertension
(v) PRECAUTIONS.....
(vi) OPERATIONAL STATUS. .....Operational
(vii) SIDE EFFECTS.....Insomnia
(viii) INTERACTIONS.....
(ix) DOSAGE.....30–60 mg, every 4–6 hours, as needed

(b) Cetirizine (Zyrtec®)

(i) AVAILABILITY.....10 mg tablet
(ii) ACTION.....Non-sedating antihistamine
(iii) INDICATIONS.....Allergic symptoms
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....Hypertension; liver/kidney dx
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....Dry mouth, urinary retention
(viii) INTERACTIONS.....
(ix) DOSAGE.....10 mg/once daily

(c) Diphenhydramine (Benadryl®)

(i) AVAILABILITY.....25 mg or 50 mg tablets
(ii) ACTION .....Sedating antihistamine
(iii) INDICATIONS .....Allergic symptoms
(iv) CONTRAINDICATIONS .....Known hypersensitivity
(v) PRECAUTIONS.....Hypertension; liver/kidney dx
(vi) OPERATIONAL STATUS.....NON-OPERATIONAL
(vii) SIDE EFFECTS.....Dry mouth, urinary retention, somnolence
(viii) INTERACTIONS.....
(ix) DOSAGE.....25–50 mg every 4–6 hours, as needed; per MD/DO

(d) Fexofenadine (Allegra®)

(i) AVAILABILITY.....60 mg tablet
(ii) ACTION .....Non-sedating antihistamine
(iii) INDICATIONS .....Allergic symptoms
(iv) CONTRAINDICATIONS .....Known hypersensitivity
(v) PRECAUTIONS .....Hypertension history; aLK CC [a]+
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS .....Dry mouth, urinary retention
(viii) INTERACTIONS.....
(ix) DOSAGE .....60mg/once or twice daily

(e) Oxymetazoline nasal spray (Afrin®)

(i) AVAILABILITY.....Nasal spray 0.05%
(ii) ACTION .....Nasal vasoconstriction; decongestant
(iii) INDICATIONS .....Rhinorrhea; sinus congestion and pain
(iv) CONTRAINDICATIONS .....Known hypersensitivity
(v) PRECAUTIONS .....aL CC [a]?
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....Nosebleed (minor) possible; often used in treatment of nosebleed
(viii) INTERACTIONS.....
(ix) DOSAGE .....Two sprays per nare, 2–3 times per day

(2) Gastrointestinal

(a) Antacid (Mylanta® or other equivalent antacid)

(i) AVAILABILITY.....Liquid (OTC)
(ii) ACTION .....Antacid
(iii) INDICATIONS .....GI upset, GERD, PUD, gastritis, esophagitis
(iv) CONTRAINDICATIONS .....Known hypersensitivity

(v) PRECAUTIONS.....Some medications require acidic pH and should not be taken at same time with this medication: aK C+ (? 1st trimester) [a]?
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....
(viii) INTERACTIONS.....Loose stools possible
(ix) DOSAGE.....15–45 mL every 4–8 hours

(b) Cimetidine (Tagamet®—or other equivalent H2 blocker)

(i) AVAILABILITY.....200/300/400 mg tablets; 300 mg IV/IM
(ii) ACTION.....H2 blocker
(iii) INDICATIONS PUD, GERD, esophagitis, gastritis
(iv) CONTRAINDICATIONS.....Known hypersensitivity; concomitant Proton Pump Inhibitor (PPI) use
(v) PRECAUTIONS.....aL CC [a]?
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....
(viii) INTERACTIONS.....
(ix) DOSAGE.....300 mg IV/IM/PO every 6–8 hours; 400 mg twice daily

(c) Loperamide (Imodium®)

(i) AVAILABILITY.....2 mg tablet (OTC) and 1mg/5mL suspension
(ii) ACTION.....Anti-diarrheal
(iii) INDICATIONS.....Diarrhea
(iv) CONTRAINDICATIONS.....Known hypersensitivity; hypertension; bloody diarrhea
(v) PRECAUTIONS.....aL CB [a]+
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....ENT dryness
(viii) INTERACTIONS.....
(ix) DOSAGE.....4 mg first dose; 2 mg each subsequent episode until stool formed; maximum 16 mg per day

(d) 5-HT3 Antagonist (Zofran® ODT/Ondansetron, 5-HT3 antagonist)

(i) AVAILABILITY.....IM/IV injectable; tablets
(ii) ACTION.....Anti-emetic; anti-motion sickness
(iii) INDICATIONS.....Nausea/vomiting
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....aK CB [a]?
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....
(viii) INTERACTIONS.....
(ix) DOSAGE.....Per MD/DO

(e) Metoclopramide (Reglan®) (injectable)

(i) AVAILABILITY.....IM/IV injectable; 10 mg
(ii) ACTION.....Anti-emetic; promotes GI motility
(iii) INDICATIONS.....Nausea/vomiting
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS Dystonic reaction risk (treat with diphenhydramine); may see sedation; aK CB [a]?
(vi) OPERATIONAL STATUS.....NON-OPERATIONAL
(vii) SIDE EFFECTS.....Sedation; dystonia
(viii) INTERACTIONS.....
(ix) DOSAGE.....10–20 mg IM/IV/PO every 4 hours, as needed; per MD/DO

(f) Dimenhydrinate (Dramamine®)

(i) AVAILABILITY.....IM/IV injectable; 50 mg tablet
(ii) ACTION.....Anti-emetic; anti-motion sickness
(iii) INDICATIONS.....Nausea/vomiting
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....May see sedation; aK CB [a]?
(vi) OPERATIONAL STATUS.....NON-OPERATIONAL
(vii) SIDE EFFECTS.....Sedation
(viii) INTERACTIONS.....
(ix) DOSAGE.....50–100 mg IM/IV/PO every 4 hours, as needed; per MD/DO

(g) Meclizine (Antivert®) (for motion sickness)

(i) AVAILABILITY.....25–50 mg tablet
(ii) ACTION.....Anti-emetic; anti-motion sickness
(iii) INDICATIONS.....Nausea/vomiting
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....May see sedation; aK CB [a]?
(vi) OPERATIONAL STATUS.....NON-OPERATIONAL
(vii) SIDE EFFECTS.....Sedation
(viii) INTERACTIONS.....
(ix) DOSAGE.....25–50 mg PO every 4 hours, as needed; per MD/DO

(h) Scopolamine transdermal

(i) AVAILABILITY.....1 mg patch
(ii) ACTION.....Anti-emetic; anti-motion sickness
(iii) INDICATIONS.....Nausea/vomiting/motion sickness prevention
(iv) CONTRAINDICATIONS.....Known hypersensitivity, hx angle closure glaucoma; hypersensitivity to belladonna alkaloids, seizures, urinary retention
(v) PRECAUTIONS.....May cause sedation, disorientation underwater

(vi) OPERATIONAL STATUS.....Operational (if previously tolerated scopolamine)
(vii) SIDE EFFECTS.....Sedation
(viii) INTERACTIONS.....Use with caution when taking other potentially sedative drugs or anticholinergics
(ix) DOSAGE.....1 mg patch every 3 days, as needed; per MD/DO

(3) Opthalmologicals

(a) Proparacaine or Tetracaine (Alcaine®) ophthetic

(i) AVAILABILITY .....Ocular anesthetic solution
(ii) ACTION.....Topical anesthetic
(iii) INDICATIONS.....To facilitate eye exam; relieve eye pain; per MD/DO
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....Ensure eye protection from foreign objects after exam
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....
(viii) INTERACTIONS.....Eye pain
(ix) DOSAGE.....1–2 drops per eye; per MD/DO

(b) Fluorescein stain (and blue light)

(i) AVAILABILITY.....Single application strips
(ii) ACTION.....Dye to facilitate eye exam
(iii) INDICATIONS.....Suspected eye injury (foreign body/ corneal abrasion)
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....N/A
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....N/A
(viii) INTERACTIONS.....N/A
(ix) DOSAGE.....One drop per eye

(c) Eye irrigation solution

(i) AVAILABILITY.....100 mL, 200 mL bottles (other sizes may also be available)
(ii) ACTION.....To facilitate irrigation of contaminants from the eye
(iii) INDICATIONS.....Following exposure of foreign body or chemical to eye
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....Not be used in penetrating eye trauma
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....
(viii) INTERACTIONS.....
(ix) DOSAGE.....Irrigate until an eye pH of 7.4 is achieved

(d) Erythromycin ophthalmic ointment

(i) AVAILABILITY.....0.5% ointment
(ii) ACTION.....Macrolide antibiotic
(iii) INDICATIONS.....Per MD/DO—infectious exposures
(iv) CONTRAINDICATIONS.....Known hypersensitivity to penicillins
(v) PRECAUTIONS.....Topical use only
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....GI upset; nausea/vomiting; diarrhea
(viii) INTERACTIONS.....
(ix) DOSAGE.....Per MD/DO

(e) pH paper

(i) AVAILABILITY.....Rolls or precut pieces of paper (other sizes may also be available)
(ii) ACTION.....To measure baseline and repeat pH during decontamination/ irrigation
(iii) INDICATIONS.....Following exposure of foreign body or chemical to eye or skin
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....Not be used in penetrating eye trauma
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....
(viii) INTERACTIONS.....
(ix) DOSAGE.....One strip approximately 1–2 inches; per MD/DO

(4) Antimicrobials/antiviral (agent-specific training)

(a) Ciprofloxacin (following exposure or prophylaxis)

(i) AVAILABILITY.....250/500/750 mg tablets; 400 mg IVPB; 250 or 500/5 suspension
(ii) ACTION.....2nd generation quinolone antimicrobial agent
(iii) INDICATIONS.....Per MD/DO—infectious exposures
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....aLK CC (teratogenicity unlikely) [a]?+
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....GI upset, nausea/vomiting, diarrhea, yeast infection
(viii) INTERACTIONS.....
(ix) DOSAGE.....Per MD/DO

(b) Triple antibiotic ointment or equivalent (Bacitracin®/Polymyxin®/Neomycin®)

(i) AVAILABILITY.....Topical ointment
(ii) ACTION.....Polypeptide antibiotic
(iii) INDICATIONS.....Per MD/DO—infectious exposures
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....Topical use only
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....Local irritation, GI upset
(viii) INTERACTIONS.....
(ix) DOSAGE.....Apply to superficial scrapes, burns, wounds, prior to dry sterile dressing.

(c) Amoxicillin/clavulanate (Augmentin®)

(i) AVAILABILITY.....875 or 125 mg tablets
(ii) ACTION.....Beta-lactamase inhibitors
(iii) INDICATIONS.....Per MD/DO—infectious exposures
(iv) CONTRAINDICATIONS.....Known hypersensitivity to penicillins
(v) PRECAUTIONS.....Liver/Kidney dx
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....GI upset; nausea/vomiting; diarrhea
(viii) INTERACTIONS.....
(ix) DOSAGE.....Per MD/DO

(d) Cefazolin (Ancef®) (PO or IV) (for trauma applications when transport delayed)

(i) AVAILABILITY.....0.5–2 grams IM/IV
(ii) ACTION.....1st generation Cephalosporin antimicrobial agent
(iii) INDICATIONS.....Per MD/DO—infectious exposures/ trauma
(iv) CONTRAINDICATIONS.....Known hypersensitivity to PCN or Cephalosporins
(v) PRECAUTIONS.....aK CB [a]+
(vi) OPERATIONAL STATUS.....NON-OPERATIONAL
(vii) SIDE EFFECTS.....GI upset, nausea/vomiting, diarrhea, yeast infection
(viii) INTERACTIONS.....
(ix) DOSAGE.....Per MD/DO

(e) Clindamycin (Cleocin®)

(i) AVAILABILITY.....150 or 300 mg tablets; reconstituted liquid 75mg/5mL
(ii) ACTION.....Antibiotic
(iii) INDICATIONS.....Suspected pharyngitis or respiratory Infection, cellulitis
(iv) CONTRAINDICATIONS.....Hypersensitivity to clindamycin
(v) PRECAUTIONS.....
(vi) OPERATIONAL STATUS.....Operational

(vii) SIDE EFFECTS .....Diarrhea
(viii) INTERACTIONS.....
(ix) DOSAGE.....Pediatrics – 10 mg/kg every 8 hours
Adult – 300 mg every 8 hours

(f) Trimethoprim/Sulfadiazine (Bactrim®)

(i) AVAILABILITY.....DS tablet
(ii) ACTION .....Sulfonamide antibiotic
(iii) INDICATIONS .....Per MD/DO—infectious exposures
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS .....Liver/kidney dx, anemia, thrombocytopenia
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS .....GI upset, nausea/vomiting, diarrhea
(viii) INTERACTIONS .....
(ix) DOSAGE .....Per MD/DO

(g) Azithromycin (Zithromax®)

(i) AVAILABILITY.....250 mg tablet
(ii) ACTION .....Macrolide antibiotic
(iii) INDICATIONS .....Per MD/DO—infectious exposures
(iv) CONTRAINDICATIONS.....Known hypersensitivity to penicillins
(v) PRECAUTIONS.....Liver/kidney dx
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS .....GI upset, nausea/vomiting, diarrhea
(viii) INTERACTIONS .....
(ix) DOSAGE.....Per MD/DO

(h) Doxycycline

(i) AVAILABILITY .....100 mg tablet
(ii) ACTION.....Tetracycline antibiotic
(iii) INDICATIONS .....Per MD/DO—infectious exposures
(iv) CONTRAINDICATIONS.....Known hypersensitivity to tetracyclines, pregnancy
(v) PRECAUTIONS.....Liver/kidney dx, photoreactivity rash
(vi) OPERATIONAL STATUS .....Operational
(vii) SIDE EFFECTS .....GI upset, nausea/vomiting, diarrhea
(viii) INTERACTIONS .....
(ix) DOSAGE.....Per MD/DO

(i) Mupirocin topical ointment (Bactroban®)

(i) AVAILABILITY.....2% topical ointment
(ii) ACTION.....Other antibiotic
(iii) INDICATIONS .....Per MD/DO—infectious exposures
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....Avoid eyes, limit prolonged use
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS .....Local irritation, GI discomfort
(viii) INTERACTIONS .....
(ix) DOSAGE.....Per MD/DO

(j) Emtricitabine and tenofovir (Truvada) (high-risk post-exposure management)
- (i) AVAILABILITY.....Tablet containing tenofovir DF 300 mg; emtricitabine 200 mg
- (ii) ACTION .....Antiretroviral
- (iii) INDICATIONS .....Per MD/DO—infectious exposures
- (iv) CONTRAINDICATIONS .....Known hypersensitivity
- (v) PRECAUTIONS .....Liver/kidney dx
- (vi) OPERATIONAL STATUS.....Operational
- (vii) SIDE EFFECTS.....GI upset, nausea/vomiting, diarrhea
- (viii) INTERACTIONS .....
- (ix) DOSAGE .....Per MD/DO

(5) Steroids

(a) Prednisone (PO)
- (i) AVAILABILITY .....PO; 1/5/10/20/50 mg tablets
- (ii) ACTION .....Corticosteroid, anti-inflammatory
- (iii) INDICATIONS .....Allergic reaction, auto-immune condition; per MD/DO
- (iv) CONTRAINDICATIONS .....Known hypersensitivity
- (v) PRECAUTIONS .....PUD/GERD/GI bleed history; aL CC [a]+
- (vi) OPERATIONAL STATUS.....Operational
- (vii) SIDE EFFECTS.....GI upset/nausea
- (viii) INTERACTIONS.....
- (ix) DOSAGE.....40 mg to 60 mg once daily; per MD/DO

(b) Dexamethasone (Decadron®) (IV/IM and/or PO)
- (i) AVAILABILITY.....PO or IV/IM; tablets
- (ii) ACTION .....Corticosteroid, anti-inflammatory
- (iii) INDICATIONS .....Allergic reaction, auto-immune condition; per MD/DO
- (iv) CONTRAINDICATIONS .....Known hypersensitivity
- (v) PRECAUTIONS .....PUD/GERD/GI bleed history, aL CC [a]-
- (vi) OPERATIONAL STATUS.....Operational
- (vii) SIDE EFFECTS.....GI upset/nausea
- (viii) INTERACTIONS.....
- (ix) DOSAGE.....10 mg once daily; per MD/DO

(6) Analgesics/Anesthetics

(a) Acetaminophen (PO)
- (i) AVAILABILITY.....Tablet: 325 and 500 mg
- (ii) ACTION .....Pain medication
- (iii) INDICATIONS.....Mild to moderate pain
- (iv) CONTRAINDICATIONS .....Known hypersensitivity, liver disease, PUD/GERD/GI bleed history
- (v) PRECAUTIONS .....aL CB [a]+
- (vi) OPERATIONAL STATUS.....Operational
- (vii) SIDE EFFECTS.....GI upset
- (viii) INTERACTIONS.....
- (ix) DOSAGE.....650–1,000 mg / 6 hours

(b) Ibuprofen (Motrin®/Advil®)

(i) AVAILABILITY.....200 mg tablet (OTC) and 100 mg/5mL suspension; 600 mg and 800 mg tablets
(ii) ACTION.....Non-steroidal anti-inflammatory pain medication
(iii) INDICATIONS.....Mild to moderate pain
(iv) CONTRAINDICATIONS.....Known hypersensitivity, renal insufficiency (not failure), PUD/GERD/GI bleed history
(v) PRECAUTIONS.....Do not use with other NSAIDs; caution with concomitant steroid use; aL CB (D in 3rd trimester) [a]+
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....GI upset/nausea, GI bleeding risk
(viii) INTERACTIONS.....
(ix) DOSAGE.....400–600 mg / 4–6 hours or 600–800 mg / 6–8 hours

(c) Naproxen (Aleve®/Naprosyn®) (PO)

(i) AVAILABILITY.....Tablet: 220/375/500 mg PO tablets
(ii) ACTION.....Non-steroidal anti-inflammatory pain medication
(iii) INDICATIONS.....Mild to moderate pain
(iv) CONTRAINDICATIONS.....Known hypersensitivity, renal insufficiency (not failure), PUD/GERD/GI bleed history
(v) PRECAUTIONS.....Do not use with other NSAIDs; caution with concomitant steroid use; aL CB (D in 3rd trimester)
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....GI upset/nausea, GI bleeding risk
(viii) INTERACTIONS.....
(ix) DOSAGE.....220–500 mg every 12 hours

(d) Tramadol (Ultram®) (PO)

(i) AVAILABILITY.....50 and 100 mg PO tablets
(ii) ACTION.....Pain medication
(iii) INDICATIONS.....Moderate to moderately severe pain
(iv) CONTRAINDICATIONS.....Known hypersensitivity, seizure Disorder, SSRI/TCA/MAOI use, renal or hepatic insufficiency (adjust dose)
(v) PRECAUTIONS.....Caution with concomitant opioid use; aLiver CC [a]?
(vi) OPERATIONAL STATUS.....Operational (if no side effects reported)
(vii) SIDE EFFECTS.....Potential dizziness/nausea
(viii) INTERACTIONS.....Antidepressants, antipsychotics, Warfarin, Digoxin, Tegretol, Quinidine
(ix) DOSAGE.....50–100 mg every 4–6 hours; 400 mg per day maximum

(e) Ketamine

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(f) Naloxone (Narcan®) (IN and/or IV)

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(g) Lidocaine (transdermal for muscular relief, or IM/SQ for stapling as temporizing measure only, alternate dosing regimen)

(i) AVAILABILITY.....1% (10 mg/mL) ampules/vials
(ii) ACTION.....Injectable anesthetic
(iii) INDICATIONS.....Local pain/injury
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....Should not exceed 4 mg/kg or 300 mg
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....With high doses: seizures, lightheadedness, ringing in ears
(viii) INTERACTIONS.....
(ix) DOSAGE.....Topical application to site of dental pain

(h) Fentanyl Transmucosal (PO)

(i) AVAILABILITY.....Lozenge / lollipop 800 mcg
(ii) ACTION.....Opioid analgesic
(iii) INDICATIONS.....Severe pain/injury
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....Controlled substance. Patient should not bite or chew the lozenge, but rather allow it to dissolve slowly in the mouth.
(vi) OPERATIONAL STATUS.....NON-OPERATIONAL
(vii) SIDE EFFECTS.....Patient must be monitored for CNS/ respiratory depression
(viii) INTERACTIONS.....
(ix) DOSAGE.....Oral application for patient directed analgesia; patient should remove the lollipop once pain is controlled

(i) Clove oil (for topical dental analgesia)

(i) AVAILABILITY.....Topical liquid (OTC)
(ii) ACTION.....Topical (dental) anesthetic
(iii) INDICATIONS.....Dental pain/injury
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....Penetrating/open intra-oral wounds
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....
(viii) INTERACTIONS.....
(ix) DOSAGE .....Topical application to site of dental pain

(j) Ketorolac (Toradol®) (injectable)

(i) AVAILABILITY.....30 mg/mL IV/IM
(ii) ACTION.....Non-steroidal anti-inflammatory pain medication
(iii) INDICATIONS.....Mild to moderate pain
(iv) CONTRAINDICATIONS .....Known hypersensitivity, renal insufficiency (not failure), PUD/GERD/GI bleed history
(v) PRECAUTIONS.....Do not use with other NSAIDs; caution with concomitant steroid use; aPlasma CC (D 3rd trimester) [a]?
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....GI upset/nausea; GI bleeding risk
(viii) INTERACTIONS.....
(ix) DOSAGE.....15–30 mg IM/IV every 6–8 hours

(7) Sleep/Wake

(a) Caffeine (No-Doz®)

(i) AVAILABILITY.....200 mg tablet
(ii) ACTION.....Enhances alertness
(iii) INDICATIONS.....Suspected caffeine withdrawal headache; to facilitate functioning with limited rest periods
(iv) CONTRAINDICATIONS .....Known hypersensitivity
(v) PRECAUTIONS .....aL CB [a]?
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....Insomnia
(viii) INTERACTIONS.....
(ix) DOSAGE.....200 mg / 3–4 hours as needed

(b) Zaleplon (Sonata®) (sleeper)

(i) AVAILABILITY.....10 mg capsule
(ii) ACTION.....Anxiolytic/hypnotic; shortest t-1/2 of agents available
(iii) INDICATIONS.....Facilitate rest during non-operational periods in prolonged deployment/transportation; minimum 4-hour block required for usage (6 hours preferred)
(iv) CONTRAINDICATIONS .....Known hypersensitivity, unsecure location, lack of assured 4-hour non-operational period
(v) PRECAUTIONS.....May not drive/operate machinery/use weapons for minimum 4 hours post-administration; aL CC [a]-
(vi) OPERATIONAL STATUS.....NON-OPERATIONAL (x 4 hours after administration)
(vii) SIDE EFFECTS.....Sedation

(viii) INTERACTIONS.....Alcohol/other sedatives potentiate effect
(ix) DOSAGE.....10–20 mg with assured 4-hour non-operational block, as approved by MD/DO and Team Commander

(c) Modafinil (Provigil®)
(i) AVAILABILITY.....200 mg tablet
(ii) ACTION.....Enhances alertness/concentration
(iii) INDICATIONS.....To facilitate functioning with limited rest periods
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....aL CC [a]?
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....Insomnia, mild blood pressure elevation
(viii) INTERACTIONS.....
(ix) DOSAGE .....200 mg once daily

(8) Wound Management

(a) Cyanoacrylate tissue adhesive (Dermabond®)
(i) AVAILABILITY.....Single use ampoules
(ii) ACTION.....Tissue adhesive
(iii) INDICATIONS.....Minor trauma
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....Avoid near eyes
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....Transient local discomfort
(viii) INTERACTIONS .....N/A
(ix) DOSAGE .....As required for wound closure, 2–4 layered applications

(b) Topical hemostatic dressing
(i) AVAILABILITY.....Individual use packages
(ii) ACTION.....Promotes blood clotting
(iii) INDICATIONS.....Hemorrhage
(iv) CONTRAINDICATIONS.....Known hypersensitivity
(v) PRECAUTIONS.....Standard/universal precautions for wound care
(vi) OPERATIONAL STATUS.....NON-OPERATIONAL
(vii) SIDE EFFECTS.....N/A
(viii) INTERACTIONS .....N/A
(ix) DOSAGE.....Single or multiple dressings applied to bleeding wound

(c) Steri-strips
(i) AVAILABILITY.....Individual use packages
(ii) ACTION.....Facilitates closure of wounds
(iii) INDICATIONS.....Superficial wounds
(iv) CONTRAINDICATIONS.....Known hypersensitivity to adhesive

(v) PRECAUTIONS.....Standard/universal precautions for wound care
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....N/A
(viii) INTERACTIONS.....N/A
(ix) DOSAGE.....Single or multiple dressings applied for wound closure; per MD/DO

(d) Staples

(i) AVAILABILITY.....Individual use staple dispensers
(ii) ACTION.....Facilitates closure of wounds
(iii) INDICATIONS .....Wounds
(iv) CONTRAINDICATIONS .....Contaminated wounds, wounds with foreign body material
(v) PRECAUTIONS.....Standard/universal precautions for wound care
(vi) OPERATIONAL STATUS.....Operational
(vii) SIDE EFFECTS.....N/A
(viii) INTERACTIONS.....N/A
(ix) DOSAGE .....Single or multiple dressings applied for wound closure; per MD/DO

(9) ACLS/Resuscitation

(a) Albuterol MDI

(i) AVAILABILITY.....0.83 mcg metered dose inhaler
(ii) ACTION .....Bronchodilator
(iii) INDICATIONS .....Respiratory distress/bronchospasm
(iv) CONTRAINDICATIONS .....Known hypersensitivity
(v) PRECAUTIONS.....Standard/universal precautions for respiratory patient
(vi) OPERATIONAL STATUS.....NON-OPERATIONAL (without MD/DO consult)
(vii) SIDE EFFECTS.....N/A
(viii) INTERACTIONS.....N/A
(ix) DOSAGE.....2 puffs, may be repeated two additional times. Additional doses per MD/DO

(10) Anti-hypoglycemics

(a) Oral glucose

Formulary per General Patient Care Protocols