California Tactical Casualty Care Training Guidelines:

- Tactical First Aid/ Tactical Emergency Medical Support (TEMS) First Responder Operations (FRO)
- Tactical Lifesaver/ Tactical Emergency Medical Support (TEMS) Technician

Emergency Medical Services Authority
California Health and Human Services Agency

EMSA #370
June 2017
FOREWORD

The California Emergency Medical Services (EMS) Authority recognizes the importance of working with state and local law enforcement in the medical planning and response to active shooter and terrorism incidents. By working closely with EMS, Fire, and Law Enforcement educators and first responders, the EMS Authority has developed this document to assist local California EMS agencies (LEMSA’s), EMS training program providers, fire service, and public safety agencies in the development of policies, operational guidelines, and training standards for tactical casualty care and coordination during active shooter and terrorism related incidents in California.

Over the past two decades, there has been significant progress in the development of national and state tactical emergency medical response strategies and training standards to improve casualty outcomes of active shooter and terrorism incidents. The EMS Authority, in collaboration with members from the California Commission on Peace Officer Standards and Training (POST), the Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE) program, and various local California EMS agencies, training program providers, and EMS employers, have collaborated to develop standardized statewide approaches to the training and response of first responder personnel to these incidents. In 2009, POST, through a partnership with the EMS Authority, released the Tactical Medicine Guidelines for Operational Programs and Standardized Training for use by law enforcement officers, supervisors, and administrators assigned to perform, supervise, or manage their Special Weapons and Tactics (SWAT) teams. In 2015, members of the FIRESCOPE program released an Incident Command System Emergency Response to Tactical Law Enforcement Incidents publication #701, for use by fire service agency personnel.

Pursuant to Health and Safety Section 1797.116, the EMS Authority has developed this document to establish additional medical training standards and guidelines for use by emergency medical care first responders to include, but not be limited to, public safety, Emergency Medical Technician (EMT), Advanced EMT (AEMT), and Paramedic personnel. These guidelines are designed to provide complementary medical training competency standards to those provided by POST and FIRESCOPE.

Core competency and training questions related to this document may be directed to Todd Frandsen at (916) 255-4168 or by email to todd.frandsen@emsa.ca.gov. Questions related to local EMS and tactical operational planning and responses may be directed to the local EMS Agency and law enforcement agencies responsible for the development of specific policies and procedures within that State jurisdiction.

Howard Backer, MD, MPH, FACEP
Director, California EMS Authority
ACKNOWLEDGEMENTS

These guidelines were developed through the steadfast and highly dedicated efforts of emergency medical services (EMS), fire, and law enforcement service providers and educators across California. The California EMS Authority and POST extend sincere appreciation to all those who volunteered their time and expertise.

California Tactical EMS Advisory Committee

The EMS Authority led a California Tactical EMS Advisory Committee to oversee this project with the collaboration by EMS, Fire, and Law Enforcement service and training leaders. The following is a list of organizations that sent representatives to participate as members of this committee:

- Alameda County Emergency Medical Services Agency (ALCO)
- Alameda County Sheriff’s Office
- Berkeley Police Department
- California Ambulance Association (CAA)
- California Commission on Peace Officer Standards and Training (POST)
- California State Fire Chiefs’ Association (CSFCA)
- California State Firefighters’ Association (CFSA)
- California Highway Patrol (CHP)
- California Office of Emergency Services (CalOES)
- California Office of the State Fire Marshal State Fire Training (CAL-FIRE)
- California Police Chiefs Association (Cal Chiefs)
- California Peace Officers’ Association (CPOA)
- California State Sheriffs’ Association (CSSA)
- City of Ontario Fire Department
- Emergency Medical Services Administrators’ Association of California (EMSAAC)
- EMS Medical Directors’ Association of California (EMDAC)
- Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE)
- Fremont Police Department
- International School of Tactical Medicine
- Los Angeles County Sheriff’s Department
- Los Angeles Fire Department (LAFD)
- Rancho Cucamonga Fire Protection District
- San Bernardino County Sheriff’s Department
- San Luis Obispo County Public Health Department
California Tactical EMS Advisory Subcommittee Members

Additionally, the following individuals are recognized for their additional contributions as sub-committee members:

Brendalyn Val Bilotti BS RN
POST Master Instructor
Alameda County Sheriff’s Office

Kimberly Petersen, Captain
Patrol Division Commander
Fremont Police Department

Thomas G. Ronay, M.D.  FACEP
Medical Director
Emergency Medical Services Agency
San Luis Obispo County Public Health Department

Gerry Malais
Battalion Chief
Los Angeles Fire Dept. Homeland Security

Jim Morrissey
Terrorism Preparedness Director
ALCO EMS
Senior SF FBI Tactical Medic

Dan Toomey
Special Consultant
Homeland Security Training Program Commission on POST

Patrick Lewis
Fire Captain/ Paramedic
Tactical Response Program Coordinator
Rancho Cucamonga Fire Protection District

Carlos Mejia, RN
Deputy Sheriff
Tactical Medic
San Bernardino County Sheriff's Department

Christopher D. Waite, Officer
Berkeley Police Department
Table of Contents

SECTIONS

1. Introduction.................................................................................................................. 1
2. Application of Training Standards.............................................................................. 6
3. Curriculum Content – Tactical First Aid/TEMS FRO.............................................. 9
5. Program and Course Review and Approval............................................................... 20

APPENDICES

A. California Tactical EMS Training Model ................................................................. 23
B. Basic Tactical Casualty Care (TCC) California Quick Reference Guide................. 24
C. Tactical Medical Planning and Threat Assessment Quick Reference.................... 25
D. EMS Integration with Law Enforcement During Active Shooter Event Quick Reference Guide.................................................................................................................. 26
E. Tactical Casualty Care (TCC) Individual First Aid Kit Recommendations......... 27
F. EMS Personnel Scope of Practice Matrix..................................................................... 28
G. References.................................................................................................................... 29
H. California TCC Training Program/Course Approval Application Form................. 30
1 INTRODUCTION

Purpose

California statutes require the Emergency Medical Services (EMS) Authority to establish additional training standards for first responders to provide emergency medical services during active law enforcement incidents such as active shooter and terrorism events\(^1\). In 2014, working closely with EMS, fire, and law enforcement educators and providers, tactical casualty care training program standards were developed. In 2015, regulations were updated to include basic tactical casualty care training during initial public safety first aid and CPR training\(^2\). These guidelines, approved in 2017 by the EMS Authority and Commission on EMS, are intended to be used as a reference for EMS training program and continuing education EMS providers to develop comprehensive, stand-alone, tactical casualty care training programs and for the approval of course curriculum by training program approval authorities.

As the framework for tactical casualty care training program development, this document is also designed to provide competency standards for statewide public safety, fire, and EMS agency personnel. These guidelines are intended to harmonize with, and be complementary to, those developed in collaboration with the California Commission on Peace Officer Standards and Training (POST) for the Tactical Medic and/or Tactical Medicine Specialist\(^3\) and those identified by members of the organization, Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE).

Additionally, the EMS Authority is responsible for setting the statewide medical training standards utilized by POST; therefore, these guidelines are intended to serve as a template for the development of operational programs by any public safety agency in California, and to serve as the minimum competency training standards for initial emergency medical services training.

Legislative Intent

In enacting AB 1598, the legislature made several important additions or changes to statutory language found in California Health and Safety Code 1797.116, 1797.134, California Government Code 8588.10, California Penal Code 13514.1 and 13519.12.

---

\(^2\) California Code of Regulations, Title 22, Division 9, Chapter 1.5
better prepare public safety personnel to provide tactical casualty care and coordinate with emergency medical services during terrorism incidents⁴.

For the purposes of AB1598, and this document, a “terrorism incident” includes, but is not limited to, an active shooter incident. An “active shooter incident” is an incident where an individual is actively engaged in killing or attempting to kill people.

The California legislature noted in their intent language that “since the Columbine High School shootings that occurred in 1999, more than 250 people have been killed in the United States during what has been classified as active shooter and mass casualty incidents.” They observed that “these incidents involve one or more suspects who participate in an ongoing, random, or systematic shooting spree, demonstrating the intent to harm others with the objective of mass murder.” Moreover, the legislature said, “It also became evident that these events may take place in any community or venue and that they impact fire and police departments, regardless of their size or capacity. Local jurisdictions vary widely in available emergency response resources, staffing, and equipment allocations.”

In enacting AB1598, the legislature was prescribing that protocols and training for response to active shooter incidents must be established locally to work within the resource capabilities and limitations of each jurisdiction. The legislature intended AB1598 to do the following:

- Require the development of collaborative protocols and relationships between local and state first response entities, including law enforcement agencies, fire departments, and emergency medical services providers and agencies, in order that those entities shall act effectively and in concert to address active shooter incidents across California.

- Require first response entities to seek collaborative training opportunities, including, but not limited to, table top or simulation exercises, to assess plan implementations, and to include other entities that may be involved in active shooter incidents in those trainings, such as schools, city or county personnel, and private businesses.

- Require basic and ongoing training for law enforcement agency personnel, fire department personnel, emergency medical services personnel, and the personnel for other first responders include, as appropriate, training and education on active shooter incidents and tactical casualty care.

It was the intent of the Legislature that each first response entity, in collaboration with other law enforcement agencies, fire departments, and emergency medical services providers and agencies, develop protocols for responding to active shooter incidents.

Those protocols must be reviewed annually to ensure that they are current, and address any policy, geographic, or demographic changes that warrant a response strategy review. The Legislature intended that the protocols address all of the following:

- The roles, responsibilities, and policies of each entity in responding to an active shooter incident.
- Pre-assessment and contingency planning that includes identification of potential targets within the jurisdiction.
- Implementation of an Incident Command System (ICS), including emergency protocols for a unified command structure for entities responding to an active shooter incident.
- Interagency communication issues and needs, including, but not limited to, radio interoperability and establishment of common language, terms, and definitions to be used on the scene of an active shooter incident.
- Identification of resources for responding to an active shooter incident, including, but not limited to, primary and secondary needs and hospitals.
- Tactical deployment of available resources for responding to an active shooter incident.
- Emergency treatment and extraction of persons injured in an active shooter incident.

California Tactical Casualty Care and Tactical Medicine

In the State of California, medically trained, certified and/or licensed first responders may respond to an active law enforcement incident as either part of an established EMS system or from within an established law enforcement special operations team. As a result, first responder resources and response protocols to active law enforcement incidents vary greatly and are established through the coordination and collaboration of local EMS, fire, and law enforcement agencies. The EMS Authority, working closely with fire and law enforcement agencies, recognized these differences and identified two distinct categories of specialized tactical field medical response and training needs of first responders during active law enforcement incidents: 1) tactical casualty care and 2) tactical medicine.

Tactical casualty care is the delivery of specialized tactical emergency medical services (TEMS) to casualties of active shooter and terrorism events by first responders from an established EMS system to include, but not be limited to, public safety personnel, EMT's, Advanced EMT’s, and paramedics as described by CCR Title 22, Division 9, Chapters 1.5 and Chapters 2-4. EMS providers who have been trained in tactical casualty care respond as medical support to law enforcement incidents and provide field tactical medical care to casualties usually in an area where there is minimal to no direct or immediate safety threat. Medical direction and oversight of the tactical casualty care first responder is provided by the local EMS medical director in coordination with local law enforcement.
In order to provide a range of specialized tactical medical field training to meet a diverse level of statewide public safety personnel, EMT, AEMT, and paramedic service provider needs, tactical casualty training standards were developed to incorporate not only EMS specific medical training, but also include fire and law enforcement response level training recommendations.

As a result, two distinct levels of tactical casualty care training program courses were identified:

1) Tactical First Aid/ TEMS FRO, 4 hours minimum
2) Tactical Lifesaver/ TEMS Technician, 40 hours minimum

The Tactical First Aid/ TEMS FRO course provides instruction on specialized tactical medical care techniques and a brief overview of tactical response and operations methodologies. The Tactical Lifesaver/ TEMS Technician course provides more advanced life support tactical medicine techniques and comprehensive instruction on the role of EMS in tactical response planning, response, and inter-department operations when providing medical support to law enforcement personnel during active shooter and terrorism incidents. Tactical EMS training courses approved by the EMS Authority prior to the effective date of this document may have different naming conventions. For those courses, training program providers shall modify their course names to reflect the course identification within this document of First Aid/FRO or Tactical Lifesaver/TEMS Technician for continued approval.

The EMS Authority and local EMS agencies are responsible for monitoring and approving tactical casualty care training programs. Training program or courses administered by statewide public safety agencies, such as the California Commission on Peace Officer Standards and Training, California Department of Parks and Recreation, California Department of Forestry and Fire Protection, and the Department of California Highway Patrol, out of state agencies, or other multi-jurisdictional public safety agencies are approved by the EMS Authority. Training programs or courses administered by local entities are approved by the local EMS agency that has jurisdiction within the area in which the program or course is headquartered.

Separately, Tactical Medicine for Special Operations is the delivery of specialized tactical emergency medical services to casualties of any active law enforcement incident by law enforcement personnel assigned to a Special Weapons and Tactics (SWAT) operations team, as described by California Penal Code 13514.1. Tactical Medicine for Special Operations first responders respond as an integral part of a SWAT operation team and may provide field tactical medical care to casualties in an area where there is a direct and immediate safety threat. Medical direction and oversight of the Tactical Medicine for Special Operations first responders are provided by a licensed physician in coordination with the local EMS agency as part of an established EMS system.
POST is responsible for monitoring and approving Tactical Medicine for Special Operations training programs and courses, in collaboration with review and approval by the EMS Authority. Additional information on the POST Tactical Medicine for Special Operations training and operation program can be found on the POST website at https://www.post.ca.gov.

The following diagram describes the spectrum of California tactical field medical response and training courses:

**California Tactical Casualty Care and Tactical Medicine for Special Operations Training Programs**

*Although the Tactical Lifesaver/TEMS Technician course includes comparable curriculum as the Tactical Medicine for Special Operations alternative 40 hour course, it is not considered an equivalent course for attendance in lieu of the Tactical Medicine for Special Operations courses required to operate as a Tactical Medic or Tactical TEMS Specialist integrated into a SWAT operations team.*

**Tactical Casualty Care Policies by Local EMS Agencies**

Local EMS agencies (LEMSA's) and first responder providers should establish policies on the protocols and coordinated response of first responders to active law enforcement incidents. Policies developed should include ongoing local training needs assessments and the collaboration of joint training and exercises with law enforcement, fire service, and EMS personnel using Incident Command System (ICS) principles and terminology.
2 APPLICATION OF TRAINING STANDARDS

The application of these training standards is designed to provide EMTs, AEMTs, paramedics, and other first responders standardized tactical casualty care training. Although these courses do not require prerequisites to attend, it is recommended that students have prior first aid, CPR, and AED knowledge or experience consistent with public safety first aid training pursuant to CCR, Title 22, Division 9, Chapter 1.5. It is highly recommended that all EMTs, Advanced EMTs, and paramedics are trained to the standards described in these guidelines.

Due to a broad range of potential attendees, tactical casualty care program providers and instructors should assess attendees’ current medical knowledge and skills then adjust their course curriculum to meet student needs. Instructors should also emphasize the important role of local EMS and law enforcement jurisdiction protocols, policies, and resources, as well as individual student scope of practices within those jurisdictions, when considering the application of tactical casualty care training.

The Tactical First Aid/TEMS FRO is a course designed to provide first responders basic tactical casualty care techniques and a broad overview of law enforcement tactical operations and first responder rescue operations methodologies. Course content shall include instructor demonstrations and student skills testing to achieve the competency standards identified in Section 3 of this document.

The Tactical Lifesaver/TEMS Technician course is intended for public safety personnel, EMT’s, AEMT’s, paramedics, and other individuals (such as physicians or nurses) with minimal to no knowledge or experience in Tactical Casualty Care techniques that may either volunteer or be employed to perform medical support in an area deemed safe, or of minimal safety risk, during an active shooter or terrorism incident. Course content shall include instructor demonstrations and student skills testing to achieve the competency standards identified in Section 4 of this document.

Tactical First Aid/TEMS FRO Course Overview

The Tactical First Aid/TEMS FRO is a course designed to provide first responders basic tactical casualty care techniques and a broad overview of law enforcement tactical operations and first responder rescue operations methodologies. Course content shall include instructor demonstrations and student skills testing to achieve the competency standards identified in Section 3 of this document. Although this course does not require prerequisites to attend, it is recommended that students have prior first aid, CPR, and AED knowledge or experience consistent with public safety first aid training pursuant to CCR, Title 22, Division 9, Chapter 1.5.
Upon completion of this course, first responders will possess the basic knowledge and skills to administer tactical casualty care to casualties during an active law enforcement incident. The course may be provided as initial training or as a continuing education course. A minimum of four (4) hours training is required, although eight (8) hours of training is recommended. The course must include the following topics:

- An overview of the California tactical casualty care initiative and its emergency medical and fire agency personnel response to active law enforcement incidents within state EMS systems,
- common tactical and rescue terminology and operations,
- description and demonstration of basic tactical casualty care techniques,
- casualty movement and evacuation techniques,
- medical planning and threat assessment considerations, and
- comprehensive, competency-based student demonstration and, when applicable, student skills testing.

Students that have successfully attended a minimum of four (4) hours of training and demonstrated a level of competency in the topics and skills described in the Curriculum content of this course through written tests and, when applicable, skills testing, shall be issued a Tactical First Aid/TEMS FRO certificate of completion.

Tactical Lifesaver/TEMS Technician Course Overview

Completion of this course should provide first responders thorough knowledge and detailed tactical casualty care skills to administer adjunct basic and advanced medical life support to casualties of an active shooter or terrorism incident. This course may be provided as initial training or as a continuing education course. A minimum of forty (40) hours training is required; and shall include the following topics:

- Introduction and course administration and safety
- An overview of the California tactical casualty care initiative
- The role of California EMS personnel as it relates to medical planning, EMS medical support response, and inter-department operations
- common tactical and rescue terminology and operations,
- casualty movement and evacuation techniques,
- threat assessment considerations,
- Hemostasis: hemorrhage control management skills
- airway and respiration management skills
- circulation management skills
- environmental injuries management
- medication administration and pain management
- medical aspects of tactical operations
- team health management, and
- comprehensive, competency-based student demonstration and skills testing.
Students that have attended a minimum of forty (40) hours of training and have successfully demonstrated, through skills assessments and testing, a level of competency in the course curriculum topics in Chapter 3 of this document shall be issued a Tactical Lifesaver/TEMS Technician certificate of completion.
3

Curriculum Content:
Tactical First Aid/TEMS FRO
Minimum 4 Hour Course

Learning Domain 1: History and Background

Competency 1.1: Demonstrate knowledge of tactical casualty care historical developments

1.1.1 Demonstrate knowledge of tactical casualty care historical developments
- History of active shooter and domestic terrorism incidents
- Define roles and responsibilities of first responders including:
  - Law Enforcement
  - Fire
  - EMS
- Review of local active shooter policies
- Scope of Practice and authorized skills and procedures by level of training, certification, and licensure zone⁵ [Appendix F]

Learning Domain 2: Terminology and definitions

Competency 2.1: Demonstrate knowledge of terminology

2.1.1 Demonstrate knowledge of terminology
- Hot Zone⁶, Warm Zone, and Cold Zone
- Casualty Collection Point (CCP)
- Rescue Task Force (RTF)
- Cover and Concealment

Learning Domain 3: Coordination, Command and Control

Competency 3.1: Demonstrate knowledge of incident command and agency integration into tactical operations

3.1.1 Demonstrate knowledge of team coordination, command, and control

---

⁵ NOTE: Always stay within scope of practice for level of certification/licensure and follow the protocols approved by the local EMS agency
⁶ The role of the TEMS technician is primarily focused on operations in the Warm Zone
Incident Command System (ICS) and National Incident Management System (NIMS)
Mutual Aid considerations
Unified Command
Communications, including radio interoperability
Command post
  - Staging areas
  - Ingress/egress
  - Managing priorities—some priorities must be managed simultaneously

Learning Domain 4: Tactical and Rescue Operations

Competency 4.1: Demonstrate knowledge of tactical and rescue operations

4.1.1 Tactical Operations—law enforcement
  - The priority is to mitigate the threat
  - Contact Team
  - Rescue Team

4.1.2 Rescue Operations—law enforcement/EMS/fire
  - The priority is to provide life-saving interventions to injured parties
  - Formation of Rescue Task Force (RTF)
  - Casualty Collection Points (CCP)

Learning Domain 5: Basic Tactical Casualty Care and Evacuation

Competency 5.1: Demonstrate appropriate casualty care at your scope of practice and certification/licensure

5.1.1 Demonstrate knowledge of the components of the Individual First Aid Kit (IFAK) and/or medical kit [Appendix E]

5.1.2 Understand the priorities of Tactical Casualty Care as applied by zone [Appendix B]

5.1.3 Demonstrate competency through practical testing of the following medical treatment skills:
  - Bleeding control
    - Apply tourniquet
      - Self-Application
      - Application on others
    - Apply direct pressure
Apply hemostatic dressing, to include wound packing, utilizing California EMSA-approved products
Apply pressure dressing
- Basic airway management
  - Perform Head-Tilt/Chin-Lift Maneuver
  - Recovery position
  - Position of comfort
  - Airway adjuncts, such as nasopharyngeal airway (NPA) and oropharyngeal airway (OFA) insertion, if approved by the Local EMS agency
- Chest/torso wounds
- Apply chest seals, vented preferred

5.1.4 Demonstrate competency in casualty movement and evacuation
- Drags and lifts
- Carries

5.1.5 Demonstrate knowledge of local multi-casualty/mass casualty incident protocols
- Triage procedures; such as START or SALT
- CCP
- Casualty triage and treatment
- Casualty transport

Learning Domain 6: Threat Assessment

Competency 6.1: Demonstrate knowledge in threat assessment [Appendix C]

6.1.1 Understand and demonstrate knowledge of situational awareness
- Pre-assessment of community risks and threats
- Pre-incident planning and coordination
- Medical resources available

Learning Domain 7: Student Practical Assessment

Competency 7.1: Demonstrate knowledge and skills through documented cognitive and/or skills evaluation

7.1.1 Student demonstration and assessment of the medical skills specified in Learning Domain 5, Basic Tactical Casualty Care and Evacuation.

---

7 START- Simple Triage and Rapid Treatment
SALT- Sort, Assess, Lifesaving Interventions, Treatment/Transport
7.1.2 Knowledge of coordinated law enforcement, fire, and EMS response procedures, including the formation of RTF, adhering to ICS and unified command principles as applicable by local jurisdiction. [Appendix D]
Curriculum Content:
Tactical Lifesaver/TEMS Technician
Minimum 40 hour course

Learning Domain 1: Introduction and Administration of Tactical Lifesaver/TEMS Technician Course Training

Competency 1.1: Introduction and course administration and safety

1.1.1 California EMS Authority and POST administrative policies
- California Tactical EMS Training Model and Tactical Medicine Pyramid
- Application of training standards and the diversity of course target audiences

1.1.2 Safety guidelines: refer to Peace Officer Standards and Training (POST) Standardized Training Recommendations at https://www.post.ca.gov.

Competency 1.2: Introduction to Tactical Casualty Care (TCC)

1.2.1 Development of TCC
- Tactical Combat Casualty Care (TCCC) vs. Tactical Emergency Casualty Care (TECC)
- History of active shooter and domestic terrorism incidents
- TCC training program goals

Learning Domain 2: TCC in California

Competency 2.1: EMS personnel and operations

2.1.1 Roles and responsibilities of responders
- Tactical Operations - law enforcement personnel
  - Priority to mitigate the threat, scene safety
  - Tactical equipment
  - Contact team
  - Rescue team
- Rescue Operations - law enforcement/EMS/fire personnel
  - Priority to provide life-saving interventions to injured parties
o Tactical medical equipment\textsuperscript{8} [Appendix E]
o Rescue Task Force (RTF)
o Casualty Collection Points (CCP)
o Scope of practice and authorized skills and procedures by level of training, certification, and licensure\textsuperscript{9} [Appendix F]
o First Responder and TEMS Technician operations is generally conducted in the Warm Zone or green zone

2.1.2 Tactical and Rescue Operations preparation and coordination
- Community risk assessment and pre-emptive preparation response training
- Medical planning
- Medical control
- Incident Command System (ICS)
- Communications
- Inherent risks

Competency 2.2: TCC environment and casualty care considerations [Appendix D]

2.2.1 Hot Zone [Casualty Care Under Fire (CUF)/Direct Threat Care (DTC)]\textsuperscript{10}
- Description of CUF/DTC (hot) zone conditions
- Tactical team vs. response team movement and coordination
- Situation and casualty medical threat assessment and prioritization [Appendix C]
- Remote assessment and surrogate care considerations
- Casualty care of external hemorrhages
- Casualty care of airway management vs. deferred airway management
- Casualty recovery position
- Casualty extraction

2.2.2 Warm Zone [Tactical Casualty Care in the Tactical Field Care (TFC)/Indirect Threat Care (ITC)]
- Description of TFC/ITC (warm) zone condition
- Tactical team vs. response team movement and coordination
- Casualty disarmament
- Casualty assessment and treatment using the MARCHE\textsuperscript{11} acronym
  - Casualty care of massive hemorrhage
  - Casualty care of airway and respiratory distress
  - Casualty care of circulatory conditions
  - Casualty care of head injuries/hypothermia

\textsuperscript{8} Load bearing, backpack, trauma packs/Urban carry cases, medical utility vests, belt systems/Individual First Aid kits (IFAK), Self-help kits, etc.
\textsuperscript{9} See California Tactical EMS Training Model [appendix A], stay within scope of practice for level of certification/licensure, and follow the protocols approved by the local EMS Agency
\textsuperscript{10} The role of the TEMS technician is primarily focused on operations in the Warm Zone
\textsuperscript{11} Massive Bleeding-Airway-Respirations-Circulation-Head/Hypothermia-Everything Else
• Casualty recovery position
• Casualty extraction

2.2.3 Cold Zone [Tactical Casualty Evacuation Care (TACEVAC)/Evacuation (EVAC)]
• Description of the TACEVAC/EVAC zone
• Casualty MARCHE reassessment and secondary assessment
• Casualty preparation for ground and air evacuation
• Casualty spinal motion restriction (SMR), as appropriate
• Oral and written casualty care reporting during transfer of care

2.2.4 Rescue extraction demonstration and student skills assessment
• Ingress, egress, alternative methods
• Extraction considerations by zone
• Triage procedures; such as START or SALT\(^{12}\)
• Casualty movement and evacuation
  o Drags and lifts
  o Carries

2.2.5 Special casualty populations\(^{13}\)
• Rescue operations vs. tactical operations
• Extraction considerations

2.2.6 Legal considerations
• EMS, fire, law enforcement personnel authorized medical procedures
• Authorities to act
• Scope of practices [Appendix F]
• Evidence preservation
• Local protocols and medical oversight authority by the LEMSA
• Protection of health information during tactical operations

Learning Domain 3: Hemostasis: Hemorrhage (Bleeding) Control Management and Skills

Competency 3.1: Concepts and principles of hemorrhage conditions

3.1.1 Assessment and prioritization of hemorrhage conditions
• Blood loss considerations
• Signs and symptoms of shock (hypo-perfusion)
• TCC zone considerations

\(^{12}\) START- Simple Triage and Rapid Treatment
SALT- Sort, Assess, Lifesaving Interventions, Treatment/Transport
\(^{13}\) Pediatric, geriatric, mentally disabled, physically disabled, and pregnancy
3.1.2 Hemorrhage control management demonstration & student skills assessment
- Direct pressure
- Tourniquets: commercial and improvised on self and others
- Wound dressings
- Hemostatic dressings and wound packing, utilizing California EMSA-approved products. (for more information visit the EMS Authority website at http://www.emsa.ca.gov/Scope_of_Practice)
- Casualty reassessment/secondary triage

Learning Domain 4: Airway and Respiratory Management and Skills

Competency 4.1: Basic Life Support (BLS) concepts and principles of airway/respiratory management

4.1.1 Basic assessment and prioritization of casualty airway/respiratory conditions
- Signs and symptoms of respiratory distress and respiratory failure
- Scope of Practice level considerations
- TCC zone considerations

4.1.2 Basic casualty airway/respiratory management demonstration and student skills assessment
- Recovery position and position of comfort
- Chin Lift/Jaw Thrust maneuver
- Nasopharyngeal Airway (NPA)
- Chest seals (occlusive dressings), vented preferred
- Tension pneumothorax treatment, “burping the chest seal”
- Casualty reassessment/secondary triage

Competency 4.2: Advanced Life Support (ALS) concepts and principles of airway/respiratory management demonstration and student skills assessment

4.2.1 Advanced Casualty Airway/Respiratory Management Demonstration and Student Skills Assessment (optional testing of student by level of certification or license)
- Airway adjuncts, if approved by the Local EMS agency
  o Perilaryngeal Airway (PLA)
  o Supraglottic Airway (SGA)
  o Endotracheal (ET) intubation
  o Needle Cricothyroidotomy
  o Surgical Cricothyroidotomy
- Tension pneumothorax treatment, needle decompression (needle thoracostomy)
- Casualty reassessment/secondary triage
- TCC zone considerations
Learning Domain 5: Circulation Management and Skills

Competency 5.1: BLS concepts and principles of circulation

5.1.1 Assessment and prioritization of circulation conditions
- Signs and symptoms of shock
- Transport considerations
- Local trauma system considerations
- TCC zone considerations

5.1.2 Hypothermia prevention and treatment (body temperature control)

Competency 5.2: ALS concepts and principles of circulation

5.2.1 Advanced assessment and prioritization of circulation conditions
- Assessment and vital monitoring equipment; such as blood pressure, pulse oximetry
- Scope of Practice level considerations
- TCC zone considerations

5.2.2 Advanced casualty circulation management demonstration and student skills assessment
- Intravenous (IV) access
- Intraosseous (IO) access
- Review of local protocols for fluid replacement and other treatment modalities
- Casualty reassessment/secondary triage

Learning Domain 6: Environmental Injuries Management

Competency 6.1: Assessment, prioritization, and treatment of environmental injuries
- Hyperthermia and Hypothermia
- Venomous and non-venomous insect, snake, and animal bites
- Chemical, biological, radiological, nuclear contamination
- Chemical, biological, radiological, nuclear decontamination
- Scope of Practice level considerations
- Personal safety protections
- TCC zone considerations

Learning Domain 7: Medication Administration and Pain Management

Competency 7.1: Administration of oxygen.
• Scope of Practice level considerations/adherence
• TCC zone considerations

Competency 7.2: Administration of Over the Counter (OTC) medication
• Scope of Practice level considerations/adherence
• Planning, maintenance, and disposal of medications
• TCC zone considerations

Competency 7.3: Administration of analgesia
• Scope of Practice level considerations/adherence
• Topical agents
• Oral agents
• Injectable agents
• Induction agents
• Rapid sequence intubation drugs
• TCC zone considerations

Learning Domain 8: Medical Aspects of Tactical Operations

Competency 8.1: Distraction devices
• Purpose/definition of distraction devices
• Psychological/physiological effects
• Personal safety protections
• TCC zone considerations

Competency 8.2: Chemical agent deployment
• Purpose/definition of chemical agents and their tactical deployment
• Psychological/physiological effects
• Environmental exposure risks and conditions
• Personal safety protections

Competency 8.3: Less lethal weapons
• Purpose/definition of less lethal weapons
• Psychological/physiological effects
• Personal safety protections

Competency 8.4: Wound ballistics
• Injury effects by bullet type, velocity, scatter pattern
• Personal safety protections

Competency 8.5: Blast injuries
• Primary blast injuries (overpressure, shock wave)
• Secondary blast injuries (fragmentation, flying objects)
Learning Domain 9: Team Health Management

Competency 9.1: Prevention education
- Monitoring and documentation of team health data (e.g., allergies, prescription medication, chronic conditions)
- Role of the medical director and team commander
- Responder psychological resilience training

Competency 9.2: Preventive medicine
- Team immunizations
- Team fatigue, sleep management, and work/rest cycles
- Team hydration and nutrition
- Team personal protective equipment and gear
- Monitoring team physical and mental well-being

Competency 9.3: Post-incident team health care
- Purpose and description of incident debriefing
- Signs and symptoms of post-traumatic stress
- Short and long-term team health care interventions

Learning Domain 10: Student Scenario/Exercise Training & Competency Testing

Competency 10.1: Scenario/exercise training
- Tactical and response team movement and casualty extraction exercises
- Basic tactical medical scenario exercises
- Advanced tactical medical scenario exercises
- Low light tactical medical scenario exercise
- Local EMS system integration (transfer of care, hospital destination, helicopter landing zones, etc.)

Competency 10.2: Competency testing of medical skills specified in Learning Domain 2 through Learning Domain 4
- Mid-course tactical medical written examination
- Mid-course tactical medical scenario/exercise examination
- Final comprehensive capstone tactical medical written examination
- Final comprehensive capstone tactical medical scenario/exercise examination
5 PROGRAM AND COURSE APPROVAL

Tactical Casualty Care training program and/or course review and approval shall be the responsibility of either the local EMS Agency or the EMS Authority. Training program or courses administered by statewide public safety agencies, such as the California Commission on POST, California Department of Parks and Recreation, California Department of Forestry and Fire Protection, and the Department of California Highway Patrol, out of state agencies, or other multi-jurisdictional public safety agencies shall be approved by the EMS Authority. Training programs or courses administered by local entities shall be approved by the local EMS agency (LEMSA) that has jurisdiction within the area in which the program or course is headquartered.

Training program or course approval is valid for four (4) years from the date of approval and shall be reviewed by the applicable approving authority for continued approval every four (4) years. The approving authority has discretion to initiate a review of the program for renewal as early as a year prior to program expiration and may audit, evaluate, or review the program at any time.

Previously Completed Training

AB 1598 provides and allows for agencies or entities that offered previously completed Tactical EMS training to submit to the training program approval authority any relevant training for assessment of curriculum content to determine whether or not the prior training meets these training standards. In making this determination, the EMS Authority or the LEMSA should utilize the guidelines, publications, and recommended existing training programs for guidance.

Continuing Education Credits

Continuing education credits may be issued to students who have successfully completed these courses from training program providers that meet the following:

- Hold current approval from an approving authority as a continuing education training program provider, pursuant to CCR Title 22, Division 9, Chapter 11, EMS Continuing Education; and

- Hold current approval as a tactical casualty care training program provider.
Program and Course Approval Process

Program and Course Content Submission

Initial and renewing training program applicants shall submit to the applicable approving authority the Program Application form, #TCC-1A [Appendix H] and all supporting documents associated to include the following:

(1) Name of the sponsoring institution, organization, or agency;
(2) Detailed course outline that meets or exceeds the applicable course content identified in Section 3 or Section 4 of this document.
(3) Final written examination with pre-established scoring standard for those programs with courses approved to provide CE credits;
(4) Skill competency testing criteria, with pre-established scoring standards;
(5) Name and qualifications of instructor(s); and
(6) Sample of course completion record.

The approving authority may request additional materials or documentation related to course curriculum or staff qualifications.

Training Instructor Eligibility

Training instructor eligibility requirements should include, but not be limited to, instructor knowledge and proficiency in the skills being taught and have either education or experience in teaching adult learners.

The training program provider shall be responsible for validating instructor qualifications.

Training Program Notification

The tactical casualty care training approving authority shall, within twenty-one (21) days of receiving a request for training program approval, notify the requesting training program that the request has been received, and shall specify what information, if any, is missing. Training program approval or disapproval shall be made in writing by the training program approving authority to the requesting training program after receipt of all required documentation. Notification of program approval or deficiencies resulting in disapproval shall be made in writing by the training program approval authority to the requesting training program within a time period not to exceed ninety (90) days.

A certificate of program approval shall be provided to the program provider upon approval of their program and shall contain the following training program information:

- Provider name
- Program or course location
- Type of tactical casualty care course(s)
- Approval effective date
• Approval expiration date

Upon approval, the EMS Authority and LEMSA’s are responsible for the entry and updating of their respective tactical casualty care training program approval information in the training program database located on the EMS Authority website.

Withdrawal of Program Approval

Noncompliance with any criterion required for tactical casualty care training approval, use of any unqualified teaching personnel, or noncompliance with any other applicable provision of these guidelines may result in denial, probation, suspension, or revocation of the tactical casualty care training program or course. For those programs with continuing education approval, the approving authority has discretion to suspend or revoke the tactical casualty care courses specifically without affect to any other EMS courses being provided under the programs continuing education provider approval.

The training program approving authority shall notify the training program course director of the noncompliance in writing, by registered mail. Within fifteen (15) days of receipt of the notification of noncompliance, the training program shall submit in writing, by registered mail, to the training program approving authority one of the following: 1) evidence of compliance with the provisions of these guidelines, or 2) a plan for meeting compliance within thirty (30) days from the day of receipt of the notification of noncompliance.

Within fifteen (15) days of receipt of the response from the training program, or within thirty (30) days from the mailing date of the noncompliance notification if no response is received from the training program, the training program approving authority shall notify the Authority and the approved training program in writing, by registered mail, of the decision to accept the evidence of compliance, accept the plan for meeting compliance, place on probation, suspend or revoke the training program approval.

If the training program approving authority decides to suspend, revoke, or place a training program on probation, the notification of decision shall include the beginning and ending dates of the probation or suspension and the terms and conditions for lifting the probation or suspension or the effective date of the revocation.
APPENDIX A

California Tactical EMS Training Model 2017

TACTICAL CASUALTY CARE PROGRAM

(EMSA/LEMSA Approval)

TACTICAL MEDICINE for SPECIAL OPERATIONS PROGRAM

(POST/EMSA Approval)

Tactical First Aid/TEMS FRO
4 hours minimum

Tactical Lifesaver/TEMS Technician
40 hours minimum

Alternate Tactical Medicine for Special Operations (Alternate)
40 hours + SWAT

Tactical Medicine for Special Operations
80 hours

California EMS Authority (2017)
### HOT ZONE / DIRECT THREAT (DTC) / CARE UNDER FIRE (CUF)

1. **MITIGATE** any threat and move to a safer position.
2. **DIRECT CASUALTY** to stay engaged in operation, if appropriate.
3. **DIRECT CASUALTY** to move to a safer position and apply self-aid, if appropriate.
4. **CASUALTY EXTRACTION**. Move casualty from unsafe area to include using manual drags or carries, or use a soft litter or local devices, as needed.
5. **STOP LIFE-THREATENING EXTERNAL HEMORRHAGE**, using appropriate personal protective equipment (PPE), if tactically feasible:
   - **Apply effective tourniquet** for hemorrhage that is anatomically amenable to application.
6. Consider quickly placing casualty in **recovery position** to protect airway.

### WARM ZONE / INDIRECT THREAT CARE (ITC) / TACTICAL FIELD CARE (TFC)

1. Law enforcement casualties should have weapons made safe once the threat is neutralized or if mental status altered.
2. **AIRWAY MANAGEMENT**:
   a. Unconscious patient without airway obstruction:
      - **Chin lift / Jaw Thrust maneuver**
      - **Nasopharyngeal airway**, if approved by LEMSA as an optional scope skill
      - Place casualty in recovery position
   b. Patient with airway obstruction or impending airway obstruction:
      - **Chin lift / Jaw Thrust maneuver**
      - **Nasopharyngeal airway**, if approved LEMSA optional scope skill
      - Allow patient to assume position that best protects the airway, including sitting up.
      - Place casualty in recovery position
3. **BREATHING**:
   a. All open and/or sucking chest wounds should be treated by applying a **vented chest seal or non-vented occlusive seal** to cover the defect and secure it in place.
   b. Monitor for development of a tension pneumothorax.
4. **BLEEDING**:
   a. Assess for unrecognized hemorrhage and control all sources of bleeding. If not already done, use a **tourniquet**, and appropriate **pressure dressing**.
   b. For compressible hemorrhage not amenable to tourniquet use, apply a **CA EMS Authority approved hemostatic dressing** with a **pressure bandage**.
   c. Reassess all previous tourniquets. Consider exposing the injury to determine whether a tourniquet is still necessary. If not necessary, use other techniques to control bleeding and remove the tourniquet.
   d. Apply emergency bandage or direct pressure to the wound, if appropriate.
   e. For hemorrhage that cannot be controlled with a tourniquet, apply CA EMSA-approved **hemostatic dressing**.
5. **ASSESS FOR HEMORRHAGIC SHOCK**:
   a. Elevate Lower Extremities if casualty in shock.
6. **PREVENTION OF HYPOTERMIA**:
   a. Minimize casualty exposure to the elements. Keep protective gear on if feasible.
   b. **Replace wet clothing** with dry, if possible. Place onto an insulated surface ASAP.
   c. Cover casualty with **self-heating rescue blanket** to torso.
   d. Place **hypothermia prevention cap** on head.
   e. Use dry blankets, poncho liners, etc. to assist in heat retention and protection from exposure to wet elements.
7. **PENETRATING EYE TRAUMA**:
   a. Perform a rapid field test of visual acuity
   b. **Cover eye with a rigid eye shield** (NOT pressure patch).
8. **REASSESS CASUALTY AND TREAT OTHER CONDITIONS AS NECESSARY**:
   a. Complete secondary survey checking for additional injuries or conditions.
   b. Consider **splinting known/suspected fractures** or **spinal immobilization**, if indicated.
   c. Use **nerve agent auto-injector** (i.e. Duo-Dote) for Nerve Agent Intoxication, if approved by LEMSA as an optional scope skill.
   d. Use **Epi-Pen** for anaphylactic reaction, if approved by LEMSA as an optional scope skill.
9. **BURNS**:
   a. Aggressively monitor airway and respiratory casualty status with smoke inhalation or facial burns, including oxygen or cyanide antidote treatment when significant symptoms are present.
   b. Estimate TBSA and cover burn area with dry, sterile dressings.
10. **MONITORING**:
    a. Apply monitoring devices or diagnostic equipment, if available
    b. Obtain vital signs.
11. **PREPARE CASUALTY FOR MOVEMENT**:
    a. Move casualty to site where evacuation is anticipated.
    b. Monitor airway, breathing, bleeding, and reevaluate casualty for shock.
12. **COMMUNICATE WITH CASUALTY, IF POSSIBLE**:
    a. Encourage, reassure, and explain care.
13. **CPR AND AED**:
    a. Resuscitation in the tactical environment for casualties of blast or penetrating trauma that have no pulse or respirations should only be treated when resources and conditions allow.
14. **DOCUMENTATION**:
    a. Document clinical assessments, treatments rendered, and changes in casualty status.
    b. Forward documentation to the next level of care provider.

**BLUE**- Authorized Skills for Public Safety First Aid Providers and EMTs

**RED**- Local Optional Skills which may be added by the Local EMS Agency Medical Director
## MEDICAL INTELLIGENCE (MISSION AND PATIENTS)

1. Mission type:
2. Number of potential patient(s):
3. Ages of potential patient(s):
4. Pre-Existing conditions:
5. Special populations (pediatric, elderly, disabled, language barrier, etc.):
6. Other:

## MEDICAL THREAT ASSESSMENT (TEAM)

1. Environment (weather, temperature, precipitation, wind)?
   - Cold/Hot?
   - Rain/Snow?
   - Wind? Wind Direction?
   - Health Considerations?
   - Chemicals?
   - Nuclear/Radiological?
   - Improvised Explosive Devices?
3. Biological threats?
4. Animal threats?
5. Plant threats?
6. Regional specific threats?
7. Personal Protective Equipment needs (ballistic vest, helmet, mask)

## MEDICAL PLANNING AND RESOURCES

1. Communication:
   - Tactical Frequency:_________________________
   - Base Hospital:_____________________________
2. Location of Key Areas:
   - Staging Area:_____________________________
   - Casualty Collection Point(s):________________
   - Triage Area/Treatment Area:________________
3. Hospital:
   - Closest Hospital:_________________________
   - Trauma/Burn center:________________________
4. EMS Transport:
   - Ground Ambulance:________________________
     - Staging Area:_____________________________
   - Air Ambulance:____________________________
     - Landing Zone, Lat./Long.:_________________
5. Support Services:
   - Poison Control, 1-800-222-1222
   - Veterinary Services? Animal Control?
   - Mental Health/Chaplain?
   - Social Services/CPS/APS?
   - Public Works?

## TEAM HEALTH CONSIDERATIONS

1. Team medical records completed? Access to records?
2. Exposure protection:
3. Hydration:
4. Food/Nutrition:
5. Extended Operation Care (sleep, fatigue):
6. Rehabilitation/First Aid Station needs:
7. Other:
APPENDIX D

EMS Integration With Law Enforcement During Active Shooter Event Quick Reference Guide

PREPARATORY PHASE

<table>
<thead>
<tr>
<th>Preparatory Phase</th>
<th>Indirect Threat: Warm/Yellow Zone Operations Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ARRIVE AND REPORT to Staging Area in Secure Area</td>
<td>1. MAINTAIN COVER AND CONCEALMENT</td>
</tr>
<tr>
<td>2. REPORT TO UNIFIED COMMAND (UC) - Notify UC that an EMS Team/Rescue Group is ready, staged, and awaiting direction.</td>
<td>2. UTILIZE TACTICAL CASUALTY CARE (TCC) PRINCIPLES - Triage as required</td>
</tr>
<tr>
<td>3. Personal Protective Equipment (PPE): - Ballistic vest, helmet</td>
<td>3. FINALIZE DIRECTION of MOVEMENT - Identify Hot, Warm, and Cold Zone areas</td>
</tr>
<tr>
<td>4. Personal Protective Equipment (PPE): - Ballistic vest, helmet</td>
<td>5. MAINTAIN SITUATIONAL AWARENESS</td>
</tr>
<tr>
<td>5. Prepare MEDICAL EQUIPMENT: - Tourniquet, trauma kit</td>
<td>5. IDENTIFY DYNAMIC CCP</td>
</tr>
<tr>
<td>6. Perform Brief MEDICAL INTEL AND THREAT ASSESSMENT - Identify Hot, Warm, and Cold Zone areas</td>
<td>6. MOVE CASUALTIES - Warm Zone to Cold Zone treatment areas preferred</td>
</tr>
<tr>
<td>7. Establish COMMUNICATION with respective on-scene medical, fire, and law enforcement. - Determine and broadcast response routes for additional responding resources - Obtain duress code</td>
<td>7. PREPARE TO RE-ENTER WARM ZONE</td>
</tr>
</tbody>
</table>

RESCUE TASK FORCE FORMATION AND PRIORITY SETTING PHASE

<table>
<thead>
<tr>
<th>Rescue Task Force Formation and Priority Setting Phase</th>
<th>POST INCIDENT PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. FORM RESCUE TASK FORCE (RTF) - Minimum of two (2) law enforcement officers - Minimum of two (2) EMS personnel - Designate Team Leader</td>
<td>1. ENSURE RTF ACCOUNTABILITY</td>
</tr>
<tr>
<td>2. FOLLOW law enforcement RTF leader direction - Know Hot, Warm, and Cold Zones - Follow protected access routes</td>
<td>2. COLLECT INCIDENT MANAGEMENT RECORDS AND UNIT LOGS</td>
</tr>
<tr>
<td>3. BRIEF objective and direction of movement - Identify initial emergency egress routes - Identify secure extraction lane - Identify initial safe refuge area - Identify rally point - Identify “Mayday” operations emergency evacuation</td>
<td>3. DETERMINE AND ANNOUNCE INCIDENT DEBRIEFING STRATEGY</td>
</tr>
<tr>
<td>4. IDENTIFY CASUALTY COLLECTION POINTS (CCP). Dynamic and static</td>
<td>4. ASSESS MENTAL AND PHYSICAL RESPONDER HEALTH</td>
</tr>
<tr>
<td>5. REINFORCE MISSION PRIORITIES (THREAT) T - Threat suppression H - Hemorrhage control RE - Rapid extrication to safety A - Assessment by medical providers T - Transport to definitive care</td>
<td>5. MANAGE A FORMAL UNIT RELEASE PROCESS</td>
</tr>
</tbody>
</table>

California EMS Authority (2017)
First responders and their employers shall adhere to LEMSA medical direction and approval of first responder medical equipment. The following is a list of recommended medical equipment individual responders on a team may carry in their first aid kit.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Type of Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medical Pouch</td>
</tr>
<tr>
<td>6</td>
<td>Gloves (Trauma, latex-free, 3 pair)</td>
</tr>
<tr>
<td>1</td>
<td>Tourniquet, Co-TCCC-Recommended</td>
</tr>
<tr>
<td>1</td>
<td>Pressure Bandage</td>
</tr>
<tr>
<td>1</td>
<td>Hemostatic Dressing, LEMSA/EMSA approved</td>
</tr>
<tr>
<td>1</td>
<td>Nasopharyngeal Airway (28f size with water-based lubricant), if approved by the local EMS agency Medical Director</td>
</tr>
<tr>
<td>1</td>
<td>Chest Seal, vented preferred</td>
</tr>
<tr>
<td>1</td>
<td>Rescue Blanket (disposable-consider thermal reflective material)</td>
</tr>
<tr>
<td>1</td>
<td>Pen, Permanent Marker</td>
</tr>
<tr>
<td>1</td>
<td>Shears, Trauma</td>
</tr>
<tr>
<td>1</td>
<td>Gauze, Roller Bandage or Elastic Bandage</td>
</tr>
</tbody>
</table>

California EMS Authority (2017)
## APPENDIX F
### EMS Personnel Scope of Practice

#### Matrix 2017

<table>
<thead>
<tr>
<th>Public Safety Personnel</th>
<th>EMT</th>
<th>Advanced EMT</th>
<th>Paramedic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Authorized Skills</strong></td>
<td><strong>Basic Scope</strong></td>
<td><strong>Basic Scope</strong></td>
<td><strong>Basic Scope</strong></td>
</tr>
<tr>
<td>(CCR §100018)</td>
<td>(CCR §100063)</td>
<td>(CCR §100063)</td>
<td>(CCR §100146)</td>
</tr>
<tr>
<td>Perform CPR &amp; AED</td>
<td>All Public Safety Skills</td>
<td>All EMT skills</td>
<td>All Public Safety, EMT, &amp; AEMT skills and medications</td>
</tr>
<tr>
<td>Perform patient evaluation</td>
<td>Perform patient assessment</td>
<td>Use of perilyngeal airways</td>
<td>Use of laryngoscope, to remove foreign bodies with magills</td>
</tr>
<tr>
<td>Treatment for shock</td>
<td>Render basic life support, rescue and emergency medical care</td>
<td>Use of tracheo-bronchial suctioning</td>
<td>Use of lower airway multilumen adjuncts, esophageal airway, perilyngeal airways, stomal intubation, Endotracheal (ET) intubation (adults, oral)</td>
</tr>
<tr>
<td>Provide airway support including: Head-tilt/chin lift; jaw thrust; Manage manual airway obstructions; recovery position.</td>
<td>Administer advanced first aid and OTC medications with LEMSA approval</td>
<td>Institute intravenous (IV) catheters, saline locks, needles or other cannulae (IV lines)</td>
<td>Perform Valsalva’s Maneuver</td>
</tr>
<tr>
<td>Perform spinal immobilization</td>
<td>Transport ill and injured persons</td>
<td>Administer IV glucose, isotonic balanced salt solutions, and naloxone</td>
<td>Perform needle thoracostomy &amp; cricothyrotomy</td>
</tr>
<tr>
<td>Perform splinting</td>
<td>Administer adjunctive breathing aids</td>
<td>Establish pediatric intraosseous access</td>
<td>Perform naso/orogastric tube insertion/suction</td>
</tr>
<tr>
<td>Irrigate eye</td>
<td>Administer oxygen</td>
<td>Obtain venous and/or capillary blood samples</td>
<td>Monitor thoracostomy tubes</td>
</tr>
<tr>
<td>Assist with oral glucose administration</td>
<td>Extract patients</td>
<td>Measure blood glucose</td>
<td>Monitor/adjust potassium (&lt; 40 mEq/L) IV lines</td>
</tr>
<tr>
<td>Assist with physician-prescribed epinephrine auto-injector and naloxone</td>
<td>Conduct field triage</td>
<td>Administer IV glucose</td>
<td>Utilization &amp; monitoring of electrocardiographic devices</td>
</tr>
<tr>
<td>Assist in emergency childbirth</td>
<td>Use mechanical restraints</td>
<td>Use mechanical restraints</td>
<td>Defibrillation</td>
</tr>
<tr>
<td>Control hemorrhaging by direct pressure, pressure bandages, tourniquets, wound packing, and hemostatic dressings</td>
<td>Assist with administration of prescribed devices</td>
<td>Institute intravenous: o Nitroglycerine</td>
<td>Perform cardiac pacing</td>
</tr>
<tr>
<td>Apply chest seals and dressings</td>
<td>Use of pulse oximetry</td>
<td>o Aspirin</td>
<td>Perform synchronized cardioversion</td>
</tr>
<tr>
<td>Perform simple decontamination techniques</td>
<td>Administer continuous positive airway pressure</td>
<td>o Glucagon</td>
<td>Administer 25 medications</td>
</tr>
<tr>
<td><strong>Optional Skills (LEMSA Approved)</strong></td>
<td></td>
<td>Administer 7 drugs in a route other than intravenous: o Inhaled beta 2 agonists</td>
<td>Bi-level positive airway pressure (BPAP) and positive end expiratory pressure (PEEP)</td>
</tr>
<tr>
<td>Administer Epinephrine Auto-injectors</td>
<td>Institute oropharyngeal &amp; nasopharyngeal airways</td>
<td>o Activated charcoal</td>
<td>Institute intraosseous (IO) needles or catheters</td>
</tr>
<tr>
<td>Administer oxygen</td>
<td></td>
<td>o Naloxone</td>
<td>Use of pre-hospital laboratory devices</td>
</tr>
<tr>
<td>Administer duodote kits for self/peer</td>
<td></td>
<td>o Epinephrine</td>
<td>Optional Skills</td>
</tr>
<tr>
<td>Administer naloxone</td>
<td></td>
<td>Previously certified EMT-Is have additional medications approved by the local EMS agency</td>
<td></td>
</tr>
<tr>
<td>Institute oropharyngeal &amp; nasopharyngeal airways</td>
<td></td>
<td>Optional Skills</td>
<td></td>
</tr>
<tr>
<td><strong>Optional Skills</strong></td>
<td></td>
<td>Local EMS Agencies may add additional skills and medications if approved by the EMS Authority</td>
<td></td>
</tr>
</tbody>
</table>

---

**California EMS Authority (2017)**
APPENDIX G

Further Suggested Reading on Best Practices

Active Shooter Awareness Guidance:  


Assembly Bill No. 1598  
http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB1598

Committee for Tactical Emergency Casualty Care (C-TECC) - IAFF position paper  

C-TECC-  http://www.c-tecc.org/

FBI Resources for Active Shooter/MCI Incidents -  
https://www.fbi.gov/about/partnerships/office-of-partner-engagement/active-shooter-resources

FBI Study of Active Shooter Incidents -  

FEMA for guidance on the incident command system:  https://www.fema.gov/incident-command-system-resources

Firescope - Emergency Response to Law Enforcement Incidents ICS 701  
http://www.firescope.org/docs-operational-guidelines/ics%20701.pdf

Hartford Consensus II for national consensus strategies on improving survivability for mass casualty shooting events:  http://www.naemt.org/Files/LEFRTCC/Hartford_Consensus_2.pdf

Integrated response:  


POST/EMSA Tactical Medicine Guidelines:  
http://lib.post.ca.gov/Publications/TacticalMedicine.pdf

Texas State University Study of Active Shooter Events -  http://alerrt.com/
# APPENDIX H

California TCC Training Program/Course Approval Application Form

<table>
<thead>
<tr>
<th>Please Type or Print Clearly.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRAINING COURSE(S) INFORMATION</strong></td>
</tr>
<tr>
<td>□ Tactical First Aid/TEMS FRO – minimum 4 hour course</td>
</tr>
<tr>
<td>o Traditional (Stand Alone) Program Approval</td>
</tr>
<tr>
<td>o CE Approval</td>
</tr>
<tr>
<td>□ Tactical Lifesaver/TEMS Technician – minimum 40 hour course</td>
</tr>
<tr>
<td>o Traditional (Stand Alone) Program Approval</td>
</tr>
<tr>
<td>o CE Approval</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>TRAINING PROVIDER INSTITUTION INFORMATION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Provider:</td>
</tr>
<tr>
<td>[ ] Statewide Public Safety and other Multijurisdictional (EMSA approval)</td>
</tr>
<tr>
<td>[ ] Local (LEMSA approval)</td>
</tr>
<tr>
<td>Company/Institution/Agency Name:</td>
</tr>
<tr>
<td>Address:</td>
</tr>
<tr>
<td>City:</td>
</tr>
<tr>
<td>State:</td>
</tr>
<tr>
<td>Zip Code:</td>
</tr>
<tr>
<td>Business Phone Number:</td>
</tr>
<tr>
<td>Website:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>APPLICANT INFORMATION</strong> (Program Director)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Name:</td>
</tr>
<tr>
<td>First Name:</td>
</tr>
<tr>
<td>Middle Initial:</td>
</tr>
<tr>
<td>Address:</td>
</tr>
<tr>
<td>City:</td>
</tr>
<tr>
<td>State:</td>
</tr>
<tr>
<td>Zip Code:</td>
</tr>
<tr>
<td>Business Phone Number:</td>
</tr>
<tr>
<td>Email Address:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ADDITIONAL SUPPORTIVE DOCUMENTS PROVIDED</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit with this application</td>
</tr>
<tr>
<td>[ ] Course Schedule w/Hourly Distribution</td>
</tr>
<tr>
<td>[ ] List of Tactical Medical Scenarios</td>
</tr>
<tr>
<td>[ ] Course Outline</td>
</tr>
<tr>
<td>[ ] Written / Skills Competency Examinations, if applicable</td>
</tr>
<tr>
<td>[ ] Course Curriculum</td>
</tr>
<tr>
<td>[ ] Written Course Safety Policy</td>
</tr>
<tr>
<td>[ ] List of Psychomotor Skills</td>
</tr>
<tr>
<td>[ ] Instructor Resume(s)</td>
</tr>
</tbody>
</table>

**SIGNATURE**

I hereby certify **under penalty of perjury** that all information on this application is true and correct. I understand that any falsification or omission of material facts may cause denial of this program or course approval and that all information on this application is subject to verification.

**SIGNATURE OF APPLICANT** ___________________________ **DATE** ___________________________

---

**Local EMS Agency / EMS Authority Official Use**

<table>
<thead>
<tr>
<th>Approving Authority:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
</tr>
<tr>
<td>Approve/Deny:</td>
</tr>
<tr>
<td>□ Approve, Expiration Date: ___________________________</td>
</tr>
<tr>
<td>□ Deny, reason: ___________________________</td>
</tr>
</tbody>
</table>

**Comments:** ___________________________