

TCC Expanded Outline
Santa Ana Police Department
9 hours

1. Introduction
 - a. Sign-in/Administrative/Documentation
 - i. Pre-Written Exam
 - b. Instructors
 - c. House rules
 - d. Schedule outline
2. History of Military TCCC and Civilian TECC model
 - a. Objectives
 - i. Give a brief overview of the evolution of TCCC and differences between military and civilian TECC models.
 - b. What is TCCC and why does it matter?
 - c. TCCC in Special Operations
 - i. 1996 Military Medicine Study/Report
 - ii. Tactical Trauma Care Vs. Civilian Care Settings
 - iii. Committee on Tactical Combat Casualty Care, formed in 2001
 1. Casualty Fatality Rate Statistics, 1941-2005
 - d. What is the cause of increased survival rates? Holcomb et. al., J. Trauma 2006
 - i. Several reasons, including TCCC.
 - e. Committee on Tactical Emergency Casualty Care, 2011
 - i. TECC Model vs TCCC Model considerations
 1. Civilian scope of practice and authorized skills and procedures
 2. Target Audience
 3. Evacuation to definitive care-distance/time
3. Incident Command System
 - a. Unified Command
 - i. Fire and EMS as First Responders
 - ii. Roles and responsibilities of Law Enforcement
 - iii. Coordination of Law Enforcement and Mutual Aid considerations
 1. Command, control and communications
 2. Command Post
 3. Staging Areas
 4. Ingress/Egress
 5. Managing priorities
4. Principles of Tactical Casualty Care (TCC)
 - a. Point of wounding care and importance of first responder.
 - i. Self-aid/Buddy aid
 - b. Potentially survivable deaths
 1. Compressible hemorrhage, tension pneumothorax, airway compromise.

- ii. TCC four preventable causes of death--concepts introduced, to be defined in later session.
 - 1. Massive extremity bleeding
 - 2. Tension pneumothorax
 - 3. Airway compromise
 - 4. Hypothermia—a secondary cause but easier to prevent than treat.
 - c. Phases of Care by zone
 - i. Hot Zone
 - ii. Warm Zone
 - iii. Tactical Evacuation to Cold Zone
5. Summary of Key Points
6. Individual First Aid Kit (IFAK)
- a. Objective is to name each item and give basic nomenclature.
 - b. Issue IFAK
 - c. An overview of Kit contents.
 - i. Leg pouch with Molle
 - 1. Alternatives to carrying the contents
 - 2. Important to have equipment when needed
 - ii. Tourniquets
 - 1. SOF Tactical Tourniquet (SOFTT-Wide) Nomenclature
 - 2. Pressure points
 - 3. Specific emphasis on its proper application
 - a. Mistakes to avoid
 - b. One-handed application
 - 4. Practical Application-Students to demonstrate correct application; assessed throughout the day.
 - a. Subsequent modules to indicate various extremity wounds and trigger self/buddy applications during class.
 - iii. Gauze and bandage
 - 1. Oleas Bandages-“all in one” package
 - a. Bandage, abdomen (ABD) pad, gauze
 - iv. Occlusive Dressing/chest seal
 - 1. Hydrogel, package contains two
 - 2. Can be folded/cut
 - v. Hook knife
 - 1. Faster than scissors, works with gross motor skills
 - 2. Announce “cutting” when in use; single pathway when cutting
 - vi. Emergency blanket
7. Preventable Causes of Death
- a. Objectives
 - i. Focus is on cause, NOT TREATMENT. Treatment is deferred for later sessions.
 - b. Four preventable causes of death
 - c. Hemorrhage

- i. Blood Loss
 - ii. Shock
 - iii. Blood volume
 - iv. Altered level of consciousness (ALOC)
 - 1. What it is
 - 2. Signs of ALOC
 - d. Tension Pneumothorax
 - i. Sucking chest wound
 - ii. What is tension pneumothorax
 - iii. Causes of tension pneumothorax
 - iv. Signs of tension pneumothorax
 - e. Airway Trauma
 - i. Airway and the respirator system
 - ii. Maxillofacial trauma
 - iii. Cervical spine injuries
 - 1. Penetrating vs. blunt force trauma
 - 2. Not a priority in TCC
 - f. Hypothermia
 - i. Decrease of body temperature
 - 1. Interferes with blood clotting
 - 2. Leads to shock
 - 3. Easier to prevent than to treat
 - g. MARCHE is introduced
 - i. Massive Bleeding
 - ii. Airway
 - iii. Respiration
 - iv. Circulation
 - v. Hypothermia/Head Trauma
 - vi. Everything else/Evacuation
 - h. Summary of Key Points
8. Priority of Care
- a. Objectives
 - i. Determine priority of care for needed interventions
 - ii. Introduce interventions to be covered in Skills Stations
 - b. Patient assessment using MARCHE
 - i. Self aid/buddy aid is emphasized
 - ii. Proper treatment for each priority is covered in detail
 - c. Massive Bleeding
 - i. Control/stop the bleeding
 - ii. Direct Pressure
 - iii. Tourniquet
 - iv. Second tourniquet—once applied, DO NOT remove, use a second.
 - v. Wound packing-gauze/hemostatic dressing.
 - d. Airway Management
 - i. Airway support
 - ii. Chin lift, jaw thrust

- iii. Recovery position
 - iv. Allow conscious casualty to sit up/lean forward if it will produce the best airway.
 - e. Respiration
 - i. Check for wounds
 - 1. Expose torso
 - 2. Raking-neck to navel, front to back, side to side
 - 3. Consider future movement and need for protective equipment
 - ii. Cover/Seal injuries
 - 1. Use a gloved hand
 - 2. Apply chest seal
 - f. Circulation
 - i. Check for non-life threatening bleeding
 - ii. Elevate legs
 - iii. Bandage additional open wounds
 - iv. Do not delay evacuation for non-life threatening injuries
 - g. Hypothermia
 - i. Keep casualty warm
 - ii. Use emergency blanket
 - iii. Place object between casualty and the ground
 - iv. Remove wet clothing
 - h. Head Trauma
 - i. Bandage eye injuries
 - ii. Most non-serious head injuries are just ugly and minimal intervention is needed. If serious, will require surgery (not possible in TCC).
 - i. Everything else
 - i. Re-check everything.
 - ii. Head to toe, treat as you go.
 - j. Evacuation
 - i. Prepare casualty for evacuation
 - ii. Communicate injuries
 - iii. Clean the casualty
 - k. Mass Casualty Incident (MCI) Triage
 - i. START
 - 1. Simple Triage and Rapid Treatment
 - ii. MCI Triage area in a Cold Zone
 - iii. Boston Bombing Case study
 - l. Summary of Key points
9. Phases of Care-Priorities of care as applied by zone
 - a. Objectives
 - i. Use the phases of care to assess each situation and decide what to do when.
 - ii. Maintain situational awareness at all times
 - b. Importance of planning.
 - i. Operational considerations
 - 1. Accomplish the mission with minimal casualties

- 2. Prevent any casualty from sustaining additional injuries
 - 3. Minimize public harm
 - ii. TCC goals align with any mission
 - iii. Contact Team vs Rescue Team
 - c. Hot Zone/Direct Threat Phase
 - i. What is a Hot Zone/Direct Threat?
 - 1. An area with an active threat or has not been cleared by law enforcement
 - 2. Keep response team maximally engaged in mitigating the existing threat
 - ii. Timing is everything
 - iii. Patient assessment/priority of care by zone
 - 1. Stop the threat
 - 2. Apply **MARCHE**
 - 3. Massive bleeding
 - a. Self-aid, direct casualty if needed-PRESSURE
 - b. Apply a hasty tourniquet
 - c. Buddy aid
 - 4. Airway support
 - a. Recovery position
 - 5. Evacuation
 - a. Get behind cover/concealment
 - i. Direct casualty to cover/concealment
 - b. Moving a casualty
 - c. What is a Casualty Collection Point (CCP)?
- d. Warm Zone/Indirect Threat Phase
 - i. What is Indirect Threat?
 - 1. Priority is to provide life-saving intervention to injured parties and prepare for extraction.
 - ii. Patient assessment/priority of care by zone
 - 1. Within CCP or behind cover/concealment
 - 2. Reassess existing interventions
 - 3. Apply full MARCHE
- e. Tactical Evacuation to Cold Zone
 - i. What is Tactical Evacuation?
 - 1. Evacuation to Fire EMS/Cold Zone/definitive care.
 - 2. Reassess all interventions applied in previous phases of care.
 - ii. Shelter in place vs evacuations
 - 1. Get behind cover
 - 2. Casualty Collection Point (CCP)
 - 3. Fire Staging Area
 - 4. Rescue Task Force (RTF)
 - a. Assign a team leader
 - b. Rescue, holster up and focus on the rescue.
 - iii. Drags
 - 1. Appropriate for short distances
 - 2. Hasty movement to cover/CCP

- iv. Carries
 - 1. Effective for longer distances
 - 2. One, two, three-person carries
 - 3. Equipment assisted carries
- v. Evacuation
 - 1. Use of a vehicle (Patrol Car, ambulance, BEAR, ARV)
- vi. Patient assessment/priority of care in this phase
 - 1. Reassess existing interventions using MARCHE
 - 2. Do not delay evacuation for non-life threatening interventions
 - 3. Consider upcoming scenarios and expectations from the students.
What skills/level of understanding will students need to demonstrate?
- vii. Summary of Key Points
- viii. Safety Briefing: ****Secure all Weapons****

10. Essential Skills Stations/MARCHE Scenarios

- a. Practical Application-Each student shall be assessed for demonstrated skills on each intervention.
- b. Massive bleeding/Circulation
 - i. Massive bleeding interventions
 - 1. Pressure, tourniquet, wound pack
 - 2. Arterial bleeding
 - ii. Use of gauze/hemostatic dressing
 - iii. Pack to the bone
 - iv. Bandage once packed
 - v. Bandage non-life threatening wounds
 - vi. Technique is more important than speed
- c. Airway/Respiration/Hypothermia
 - i. Exposing wounds-hook knife
 - ii. Raking-check for injuries
 - iii. Chest seal application
 - iv. Recovery position
 - v. Emergency Blanket
- d. Evacuation
 - i. Formation of RTF
 - ii. Lifts, Drags, and carries
 - 1. Poleless litters and other equipment
 - iii. High threat extraction using a vehicle
 - iv. Mass Casualty triage and treatment
 - v. Coordination with Fire/EMS for extraction
- e. Low light MARCHE scenario
 - i. Injury requiring drag to CCP and use of tourniquet
 - ii. MARCHE assessment once in CCP, low light

11. FINAL SKILLS SCENARIO

- a. Teams are presented with a challenging scenario that requires high threat extraction over a wall/window and various elements of application of care by zone.
- b. Pre-incident planning and coordination , including formation of RTF, shall be demonstrated along with demonstrated knowledge of community risks and threats.
- c. Students should understand the knowledge of situational awareness while assessing and treating the casualty using the tools available to them (IFAK).
- d. Coordination with Fire and EMS shall adhere to ICS/unified command principles.

12. Final Written Exam

13. Debrief/Course Evaluation/Dismissal