SWAT
Tactical EMS Protocol
Version 1.0
2/2014
PROTOCOL AUTHORIZATION

The following Pre-hospital Patient Care Protocol and Procedures Manual is in effect and operational for ________________ SWAT, Ohio; their EMT, Advanced EMT, Paramedic, and ancillary personnel who operate under the Medical Control Authority and Direction of _________________.

All personnel recognized as active members, in good standing, may operate according to the limits of their individual State of Ohio EMT certification level, and in strict compliance with the following Pre-Hospital Patient Care Protocol and Procedures Manual.

All previous versions of this Protocol and Procedures Manual are considered void.

I, ________________, authorize this agency, and its official, State of Ohio, EMT certified personnel to operate as a Tactical Emergency Medical Service under my direction in accordance with this Pre-Hospital Protocol and Procedure Manual.

_________________________________________  ________________
Signature                                           Date
Medic Unit

I. Purpose

The goal of the Tactical Emergency Medical Support (TEMS) unit is to provide immediate medical care to injured or ill officers and any civilians, prevent injuries and illness where possible, and promote the completion of the mission.

The purpose of the TEMS group is to provide the team with personnel who have specialized training and equipment to meet the unique needs of the tactical team. TEMS will offer prevention and wellness care to team members, provide initial emergency medical care to team members, other police officers and any civilians and help coordinate emergency care needs of team members at the local hospital. Personnel with training in medicine across the barricade may provide assistance to the negotiators as requested. In addition, TEMS members will provide advice and safety issue concerns to the command staff as needed.

II. Objectives

A. To provide specialized on-scene care for injured tactical officers. This may include temporizing management of non-serious injuries and illnesses, which will allow the tactical officer to continue functioning during the operation.

B. To serve as a medical liaison and provide coordination between fire, Medical, HAZMAT and tactical units during SWAT activities.

C. To provide communication and coordination with the chief officer of the responding EMS unit of the authority having jurisdiction (AHJ) – usually the fire department chief or his designate. This includes establishing the safety of the medical staging area and obtaining any specialized equipment or personnel.

D. To assist the Emergency Medical Service (EMS) personnel from the AHJ. This may include providing additional medics to work with the EMS team and thereby minimize the on-scene personnel requirements for the AHJ in a prolonged situation.

E. To make available specialized equipment on scene.

F. To develop first-aid training and equipment for the tactical officers.

G. To provide emergency care for injured canine units.

H. To provide documentation of health status of persons taken into custody by SWAT prior to their release to the local police department and make recommendations for further immediate medical care vs. release for incarceration.

I. To advise the SWAT Command Staff concerning non-police safety issues such as environmental concerns, dealing with hazardous materials, medical issues with team members, or evacuation of injured parties.

J. To provide preventative medical support for team members.

K. To serve as a resource to EMS and fire in matters related to TECC.
III. Personnel

Team member shall be appointed and/or removed directly by the Fire Chief or his/her designate.

A. Requirements for tactical medical personnel, pre-hiring considerations.

1. Firefighter-paramedic licensed in the State of Ohio and a member of a fire department in a member jurisdiction of the tactical team.
2. Three years field experience as a paramedic.
3. Must be in good physical health and capable of maintaining a high degree of physical fitness.
4. Must be a motivated professional and have shown a dedication to training and reliability in attendance.
5. Must have no disciplinary action filed in the past year with the fire department/EMS Unit.
6. Must have the approval and support of their chief.
7. Must pass a background check if required by the tactical team.
8. Must pass a personal interview/oral review board with the Medical Director, Lead Medic, Fire Chief or his/her designate and a member of the Command Staff (if required by Team administrative policy).
9. Must be of a nature/character that exemplifies a high level of self-control and professionalism at all times.

B. Tactical Physicians:

1. Tactical Physicians who are members of the Tactical EMS Division are expected to practice medicine within the scope of their training and Ohio law. Such practice may deviate from this Protocol as deemed appropriate by the Tactical Physician. This Protocol is primarily for the Tactical EMS Paramedics, and is not intended to restrict or otherwise limit a Tactical Physician's scope of practice.

2. A resident from an approved residency may apply for team membership. He/she shall be at minimum a second resident who has the approval of their residency director and the team medical director. The applicant must pass a background check if required. Malpractice and Workman's Comp are the responsibility of the hospital.
IV. Operational and Deployment Issues

A. The tactical medics will provide on-going communications between medical and fire personnel and the command staff/incident command.

B. The tactical medic will assist the EMS team of the AHJ at the scene. If transportation is necessary, additional medic units will be used. The tactical medic will assure the presence of at least one EMS unit on scene at all times, unless directed otherwise by the Incident Commander or command staff. If a treatment is initiated that exceeds the training/standing orders of the EMS team providing transport, a tactical medic will accompany the patient in transport.

C. The tactical medic will be responsible for the initial evaluation and field stabilization of injured SWAT officers as well as other police officers and civilians until they can be safely evacuated to the cold zone and care is assumed by the local EMS. A tactical medic will accompany an injured SWAT member to the hospital whenever possible.

D. The tactical medic will be responsible for the initial evaluation and field stabilization of any person taken into custody by SWAT. Persons may be turned over to the EMS team if they require further medical care. Persons may only be released back to police custody with the approval of Code 1 status by medical control.

E. The tactical medic is responsible for the documentation of all activities, including run reports, patient refusals, and a medical preplan. Written reports shall be completed after each activation and signed by all medical personnel present. A copy of all forms shall be submitted to the medical director and command staff.
V. Medical Policies

A. Treatment Policy

Whenever the medic is requested to provide medical evaluation and/or treatment, the patient will be assessed, a patient care report (PCR) will be generated, and medical control contacted.

B. Patient Refusal

If a patient wishes to refuse treatment or transport, the paramedic will complete an EMS non-transport form, document on the PCR that the form has been completed, and attach the form to the chart. Medical control shall be contacted as directed by the EMS standard protocol.

C. Standing Orders

Tactical medics shall function under the standing orders of the Fire Department and medical director and in accordance with their individual State of Ohio EMT certification level.

D. TEMS Protocol

1. The intent of the following medical policies and protocols are to provide the TEMS medic with additional standing orders, which may be performed by the tactical medic in the absence of the team physician.
2. The possession of and use of medications by the tactical medic is at the discretion and direction of the Fire Department and it’s medical director. Any listing of medications in this protocol is intended for instructional and educational purposes only.
3. Commonly used over-the-counter medications may be made available for personal use by SWAT team members. The medic will administer no medications if they are not in accordance to the standing protocol. Any administration of medications shall be considered a patient encounter and all relevant protocols shall be followed.

VI. Disclaimer

Although this Protocol has undergone close scrutiny there may be errors, typographical errors, and/or omissions. If questions arise on scene one may contact the senior medical officer on scene, contact Medical Control, or follow one’s best judgment. Errors are to be brought to the Medical Director’s attention.

VII. Medical Records

All patients who are treated by SWAT TEMS are to have a PCR completed in a timely manner. PCRs are to be submitted to the Fire Department, and a copy is to be submitted to the Medical Director for review and internal Q/A. Cursory prisoner assessments post incarceration where no injury is claimed do not require a PCR and a comment noting their denial of injury is routinely contained within the event’s after-action report. Any individual requiring more than a cursory assessment for injury, and all work related injuries, no matter how “minor” or “trivial”, require a PCR.
VIII. Dynamic and Austere Environment

The tactical environment is by its very nature a dynamic and austere environment in which to practice EMS. For this reason significant latitude exists regarding strict protocol compliance, including both commission and omission of assessments, treatments, interventions, and care. Significant deviations shall be documented within the after-action report, or in a separate "Incident Report". The determination of appropriateness of such actions is at the sole discretion of the Medical Director.

This Protocol focuses on the unique aspects of Tactical EMS, and on the treatments most likely to be encountered when functioning within this environment. At times it may be necessary to provide EMS care which is not specifically detailed within this Protocol, but which is within the general scope of paramedic practice. Such a situation might exist, for example (but is not limited to), caring for a rescued hostage. In such situations a SWAT Tactical paramedic is authorized to practice as per the Fire Department’s current Protocol.

IX. General Protocol

SWAT Tactical Paramedics are authorized to practice under the SWAT Medical Director’s authorization only when functioning as part of an official SWAT activity (Call-outs, Trainings, or other sanctioned events). All practice is to be compliant with the applicable federal, state, county, and local laws and regulations.

X. Quality Improvement

All SWAT TEMS personnel are expected to participate in a Quality Improvement/Continuous Quality Improvement forum in a collegial, constructive, and positive manner. Failure in this regard may result in dismissal from the SWAT Team.
XI. General Policies

A. All personnel shall conduct themselves in a professional manner at all times during which they are on duty or in uniform.

B. All personnel shall provide care encompassing procedures and medication administrations only up to their level of training, certification, protocols, and pre-approved departmental authorization unless acting under the direct supervision of the medical director or another assigned tactical physician.

C. SWAT serves at the request of the requesting jurisdiction. SWAT TEMS personnel will not deny care or medical service to any patient based on their race, creed, religion, sexual preference, ability to pay, location, or pre arrival care, or arrest status.

D. All patients and family members are to be treated with due respect.

E. All personnel are individually responsible for being up to date on all departmental policies, procedures, and protocols.

F. This team’s Medical Direction authorization exists only while functioning under the auspices of this team.

G. PCRs and associated documentation shall be accurate, complete, and timely.

H. Patient confidentiality is to be respected at all times.

I. All personnel shall conduct operations in a manner so as to minimize undue risk, harm, or injury to themselves and their crews.

J. All personnel shall maintain departmental, State, and other regulatory credentials as required, and shall provide documentation of such as requested by the team Medical Director.

K. All medications, procedures, and ancillary medical equipment are to be specifically approved by the team Medical Director.

L. The team Medical Director is the only physician who can provide authorization (Medical Direction) to function in a medical capacity, or related support capacity, within the team.

M. The team Medical Director may limit, suspend, withdraw, or revoke an individual’s team Medical Direction authorization at any time, at the sole discretion of the team Medical Director. Medic may appeal this action according to the guidelines established by the Fire Department.
TACTICAL EMERGENCY CASUALTY CARE GUIDELINES

DIRECT THREAT CARE (DTC)

Goals:

1. Accomplish the mission with minimal casualties
2. Prevent any casualty from sustaining additional injuries
3. Keep response team maximally engaged in neutralizing the existing threat (e.g. active shooter, unstable building, confined space HAZMAT, etc.)
4. Minimize public harm

Principles:

1. Establish tactical supremacy and defer in depth medical interventions if engaged in ongoing direct threat (e.g. active fire fight, unstable building collapse, dynamic explosive scenario, etc.)
2. Threat mitigation techniques will minimize risk to casualties and the providers. These should include techniques and tools for rapid casualty access and egress.
3. Minimal trauma interventions are warranted in this phase of care.
4. Consider hemorrhage control
   a. Tourniquet (TQ) application is the primary "medical" intervention to be considered in Direct Threat.
   b. Consider instructing casualty to apply direct pressure to the wound if no tourniquet available or application is not tactically feasible.
5. Consider quickly placing or directing casualty to be placed in position to protect airway.
Guidelines:

1. Mitigate any threat and move to a safer position (e.g. Return fire, utilize less lethal technology, initiate fire suppression activities, extraction from immediate structural collapse, etc.).
2. Direct the casualty to stay engaged in operation if appropriate.
3. Direct the casualty to move to a safer position and apply self-aid if able.
4. Casualty Extraction
5. If a casualty can move to safety, they should be instructed to do so.
6. If a casualty is unresponsive, the scene commander or team leader should weigh the risks and benefits of a rescue attempt in terms of manpower and likelihood of success. Remote medical assessment techniques should be considered.
7. If the casualty is responsive but cannot move, a tactically feasible rescue plan should be devised.
8. Recognize that threats are dynamic and may be ongoing, requiring continuous threat assessments.
9. Stop life threatening external hemorrhage if tactically feasible:
   a. Direct casualty to apply effective tourniquet if able.
   b. Apply the TQ over the clothing as proximal– high on the limb– as possible.
   c. Tighten TQ until cessation of bleeding and move to safety. Consider moving to safety prior to application of the TQ if the situation warrants.
   d. TQ should be readily available and accessible with either hand.
   e. Consider instructing casualty to apply direct pressure to the wound if no tourniquet available or application is not tactically feasible.
   f. Consider quickly placing casualty, or directing the casualty to be placed, in position to protect airway if tactically feasible.

Skill Sets

1. Tourniquet application
   a. Commercially available tourniquets
   b. Field expedient tourniquets
2. Casualty extraction
3. Rapid placement in recovery position
- MITIGATE ANY THREAT AND MOVE TO A SAFER POSITION

- DIRECT THE CASUALTY TO STAY ENGAGED IN OPERATION IF APPROPRIATE.

- DIRECT THE CASUALTY TO MOVE TO A SAFER POSITION AND APPLY SELF AID IF ABLE.

- CASUALTY EXTRACTION
  - CAN MOVE TO SAFETY, THEY SHOULD BE INSTRUCTED TO DO SO
  - UNRESPONSIVE, THE SCENE COMMANDER OR TEAM LEADER SHOULD WEIGH THE RISKS AND BENEFITS OF A RESCUE ATTEMPT
  - RESPONSIVE BUT CANNOT MOVE, A TACTICALLY FEASIBLE RESCUE PLAN SHOULD BE DEVISED.
  - RECOGNIZE THAT THREATS ARE DYNAMIC AND MAY BE ONGOING, REQUIRING CONTINUOUS THREAT ASSESSMENTS.

- STOP LIFE THREATENING EXTERNAL HEMORRHAGE IF TACTICALLY FEASIBLE:
  - TOURNIQUET APPLICATION
  - PLACE IN POSITION TO PROTECT AIRWAY IF TACTICALLY FEASIBLE

KEY

- EMT
- ADVANCED EMT
- PARAMEDIC
- MED CONTROL
INDIRECT THREAT CARE (ITC)

Goals:

1. Goals 1-4 as above with DTC care
2. Stabilize the casualty as required to permit safe evacuation to dedicated treatment sector or medical evacuation assets

Principles:

1. Maintain tactical supremacy and complete the overall operational objectives.
2. As applicable, ensure safety of both first responders and casualties by rendering weapons safe and/or rendering any adjunct tactical gear safe for handling (flash bangs, gas canisters, etc.).
4. Consider establishing a casualty collection point if multiple casualties are encountered
5. As applicable, establish communication with tactical and/or command element and request or verify initiation of casualty evacuation.
Guidelines:

1. Law Enforcement casualties should have weapons made safe once the threat is neutralized or if mental status is altered.

2. Bleeding:
   a. Assess for unrecognized hemorrhage and control all sources of major bleeding:
      i. If not already done, use a tourniquet or an appropriate pressure dressing with deep wound packing to control life-threatening external hemorrhage that is anatomically amenable to such treatment.
      ii. Apply the tourniquet over the clothing as proximal–high on the limb–as possible, or if able to fully expose and evaluate the wound, apply directly to the skin 2–3 inches above wound.
      iii. For any traumatic total or partial amputation, a tourniquet should be applied regardless of bleeding.
   b. For compressible hemorrhage not amenable to tourniquet use, or as an adjunct to tourniquet removal (if evacuation time is anticipated to be longer than two hours), apply a hemostatic agent in accordance with the directions for its use and an appropriate pressure bandage. Before releasing any tourniquet on a casualty who has received IV fluid resuscitation for hemorrhagic shock, ensure a positive response to resuscitation efforts (i.e., a peripheral pulse normal in character and normal mentation).
   c. Reassess all tourniquets that were applied during previous phases of care. Consider exposing the injury and determining if a tourniquet is needed. Tourniquets applied hastily during DTC phase that are determined to be both necessary and effective in controlling hemorrhage should remain in place if the casualty can be rapidly evacuated to definitive medical care. If ineffective in controlling hemorrhage or if there is any potential delay in evacuation to care, expose the wound fully, identify an appropriate location 2-3 inches above the injury, and apply a new tourniquet directly to the skin. Once properly applied, the prior tourniquet can be loosened. If a tourniquet is not needed, use other techniques to control bleeding and remove the tourniquet.
   d. When time and the tactical situation permit, a distal pulse check should be accomplished on any limb where a tourniquet is applied. If a distal pulse is still present consider additional tightening of the tourniquet or the use of a second tourniquet, side-by-side and proximal to the first, to eliminate the distal pulse.
   e. Expose and clearly mark all tourniquet sites with the time of tourniquet application.
3. **Airway Management:**
   a. **Unconscious casualty without airway obstruction:**
      i. Chin lift or jaw thrust maneuver
      ii. Nasopharyngeal airway
      iii. Place casualty in the recovery position
   b. **Casualty with airway obstruction or impending airway obstruction:**
      i. Chin lift or jaw thrust maneuver
      ii. Nasopharyngeal airway
      iii. Allow casualty to assume position that best protects the airway, including sitting up
      iv. Place unconscious casualty in the recovery position
   c. **If previous measures unsuccessful:**
      i. Orotracheal intubation per protocol
      ii. Consider Supraglottic Devices (e.g. King LT, CombiTube, or LMA) per protocol.
      iii. Surgical cricothyroidotomy (with lidocaine if conscious) per protocol
   d. Consider applying oxygen if available

4. **Breathing:**
   a. All open and/or sucking chest wounds should be treated by immediately applying an occlusive material to cover the defect and securing it in place. Monitor the casualty for the potential development of a subsequent tension pneumothorax.
   b. In a casualty with progressive respiratory distress and known or suspected torso trauma, consider a tension pneumothorax and decompress the chest on the side of the injury with a 14-gauge, 3.25 inch needle/catheter unit inserted:
      i. In the second intercostal space at the midclavicular line. Ensure that the needle entry into the chest is lateral to the nipple line and is not directed towards the heart.
      ii. Consider a lateral decompression, inserting the needle in the 4-5\textsuperscript{th} intercostal space, anterior to the mid-axillary line on the injured side if anterior approach unavailable.

5. **Intravenous (IV) access:**
   a. Start an 18-gauge IV saline lock if indicated
   b. If resuscitation is required and IV access is not obtainable, use the intraosseous (IO) route (per agency protocol).
6. **Fluid resuscitation**: Assess for hemorrhagic shock; altered mental status (in the absence of head injury) and weak or absent peripheral pulses are the best field indicators of shock.
   a. **If not in shock**:
      i. No IV fluids necessary
      ii. PO fluids permissible if:
         1. Conscious, can swallow, and has no injury requiring potential surgical intervention
         2. If confirmed long delay in evacuation to care
   b. **If in shock**:
      i. Administer appropriate IV fluid bolus (500cc NS/LR) and re-assess casualty. Repeat bolus once after 30 minutes if still in shock.
      ii. If a casualty with an altered mental status due to suspected TBI has a weak or absent peripheral pulse, resuscitate as necessary to maintain a desired systolic blood pressure of 90mmHg or a palpable radial pulse.

7. **Prevention of hypothermia**:
   a. Minimize casualty’s exposure to the elements. Keep protective gear on or with the casualty if feasible.
   b. Remove wet clothing and replace with dry if possible. Place the casualty onto an insulated surface as soon as possible.
   c. Cover the casualty with commercial warming device, dry blankets, poncho liners, sleeping bags, or anything that will retain heat and keep the casualty dry.
   d. Warm fluids are preferred if IV fluids are required.

8. **Penetrating Eye Trauma**: If a penetrating eye injury is noted or suspected:
   a. Perform a rapid field test of visual acuity.
   b. Cover the eye with a rigid eye shield (NOT a pressure patch). If a commercial eye shield is not available, use casualty’s eye protection device or anything that will prevent external pressure from being applied to the injured eye.

9. **Reassess casualty**:
   a. Complete secondary survey checking for additional injuries. Inspect and dress known wounds that were previously deferred.
   b. Consider splinting known/suspected fracture to include applying pelvic binding techniques for suspected pelvic fractures.

10. **Provide analgesia as necessary**.
    a. **Able to continue mission**:
       i. Consider oral non-narcotic medications such as Tylenol
       ii. Avoid the use of non-steroidal anti-inflammatory medications (e.g. aspirin, ibuprofen, naproxen, ketorolac, etc.) in the trauma patient as these medications interfere with platelet functioning and may exacerbate bleeding
11. Burns:
   a. Facial burns, especially those that occur in closed spaces, may be associated with inhalation injury. Aggressively monitor airway status and oxygen saturation in such patients and consider early definitive airway management for respiratory distress or oxygen desaturation.
   b. Smoke inhalation, particularly in a confined space, may be associated with significant carbon monoxide and cyanide toxicity. Patients with signs of significant smoke inhalation plus:
      i. Significant symptoms of carbon monoxide toxicity should be treated with high flow oxygen if available
      ii. Significant symptoms of cyanide toxicity should be considered candidates for cyanide antidote administration
   c. Estimate total body surface area (TBSA) burned to the nearest 10% using the appropriate locally approved burn calculation formula.
   d. Cover the burn area with dry, sterile dressings and initiate measures to prevent heat loss and hypothermia.
   e. If burns are greater than 20% of Total Body Surface Area, fluid resuscitation should be initiated as soon as IV/IO access is established. If hemorrhagic shock is also present, resuscitation for hemorrhagic shock takes precedence over resuscitation for burn shock as per the guidelines.
      i. All previously described casualty care interventions can be performed on or through burned skin in a burn casualty.
      ii. Aggressively act to prevent hypothermia for burns greater than 20% TBSA.

12. Monitoring: Apply appropriate monitoring devices and/or diagnostic equipment if available.

13. Prepare casualty for movement: Consider environmental factors for safe and expeditious evacuation. Secure casualty to a movement assist device when available. If vertical extraction required, ensure casualty secured within appropriate harness, equipment assembled, and anchor points identified.

14. Communicate with the casualty if possible. Encourage, reassure and explain care.

15. Cardiopulmonary resuscitation (CPR) within a tactical environment for victims of blast or penetrating trauma who have no pulse, no ventilations, and no other signs of life will not be successful and should not be attempted. However, consider bilateral needle decompression for victims of torso or polytrauma with no respirations or pulse to ensure tension pneumothorax is not the cause of cardiac arrest prior to discontinuation of care.
   a. In certain circumstance, such as electrocution, drowning, atraumatic arrest, or hypothermia, performing CPR may be of benefit and should be considered in the context of the tactical situation.

16. Documentation of Care: Document clinical assessments, treatments rendered, and change in the casualty’s status in accordance with local protocol. Consider implementing a casualty care card that can be quickly and easily completed by non-medical first responders. Forward this information with the casualty to the next level of care.
Skill set:

1. **Hemorrhage Control:**
   a. Apply Tourniquet
   b. Apply Direct Pressure
   c. Apply Pressure Dressing
   d. Apply Wound Packing
   e. Apply Hemostatic Agent

2. **Airway:**
   a. Apply Manual Maneuvers (chin lift, jaw thrust, recovery position)
   b. Insert Nasal pharyngeal airway
   c. Insert Supraglottic Device (LMA, King-LT, Combitube, etc.)
   d. Perform Tracheal Intubation
   e. Perform Surgical Cricothyrotomy

3. **Breathing:**
   a. Application of effective occlusive chest seal
   b. Assist Ventilations with Bag Valve Mask
   c. Apply Oxygen
   d. Apply Occlusive Dressing
   e. Perform Needle Chest Decompression

4. **Circulation:**
   a. Gain Intravascular Access
   b. Gain Intraosseous Access
   c. Apply saline lock
   d. Administer IV/IO medications and IV/IO fluids
   e. Administer blood products

5. **Wound management:**
   a. Apply Eye Shield
   b. Apply Dressing for evisceration
   c. Apply Extremity Splint
   d. Apply Pelvic Binder
   e. Initiate Basic Burn Treatment
   f. Initiate Treatment for Traumatic Brain Injury

6. **Prepare Casualty for Evacuation:**
   a. Move Casualty (drags, carries, lifts)
   b. Apply Spinal Immobilization Devices
   c. Secure casualty to litter
   d. Initiate Hypothermia Prevention

7. **Other Skills:**
   a. Perform Hasty Decontamination
   b. Establish Casualty Collection Point
   c. Perform Triage
**ABDOMINAL PAIN / NAUSEA VOMITING**

**BASIC DIRECT THREAT CARE (B-ITC)**

- Open and manage airway
- Maintain O2 SATS >95%
- Evaluate patient condition
- Monitor vital signs
  - Hypoperfusion (BP < 100 Systolic)
- Obtain medical history
  - Nausea/Vomiting
  - Surgery
  - Trauma
- Reassess patient
- Give nothing by mouth
- Transport in position of comfort
- Law enforcement casualties should have weapons made safe once the threat is neutralized or if mental status is altered.
- Control life-threatening hemorrhage – apply tourniquet and/or hemostatic agent if indicated
- Assess and manage airway
- Perform rapid trauma assessment to find additional life and/or limb-threatening injuries.
- Prevent hypothermia
- Provide eye care if applicable
- Reassess casualty
- Prepare for evacuation

**KEY**

| EMT | ADVANCED EMT | PARAMEDIC | MED CONTROL |

**INDIRECT THREAT CARE (ITC)**

- Gain vascular access provide fluid resuscitation as indicated
- Manage pain as appropriate
**EVACUATION CARE (EVAC):**

**Goals:**
1. Maintain any lifesaving interventions conducted during DTC and ITC phases
2. Provide rapid and secure evacuation to an appropriate level of care
3. Avoid additional preventable causes of death or disability

**Principles:**
1. Reassess the casualty or casualties
2. Utilize additional resources to maximize advanced care
3. Avoid hypothermia
4. Communication is critical, especially between treating medical providers and transporting EMS assets, and between scene providers and first receivers.

**Guidelines:**
1. Reassess all interventions applied in previous phases of care. If multiple wounded, perform primary triage for priority AND destination.
2. **Airway Management:**
   a. The principles of airway management in Evacuation Care are similar to that in ITC with the addition of increased utility of supraglottic devices and endotracheal intubation.
   b. Unconscious casualty without airway obstruction: Same as ITC
   c. Casualty with airway obstruction or impending airway obstruction:
      i. Initially, same as ITC Naso/oropharyngeal airway
      ii. If previous measures unsuccessful, it is prudent to consider supraglottic Devices (King LT, CombiTube, LMA, etc.), endotracheal intubation or surgical cricothyroidotomy (with lidocaine if conscious) per local agency protocol.
   d. If intubated, reassess for respiratory decline in patients with potential pneumothoraxes.
   e. Consider the mechanism of injury and the need for spinal immobilization. Spinal immobilization is not necessary for casualties with penetrating trauma if the patient is neurologically intact. Maintain high clinical suspicion for casualties over age of 65yo with blunt mechanism. Additionally, patients may be clinically cleared from spinal immobilization under a locally approved protocol if they have none of the following:
      - Midline c-spine tenderness
      - Neurologic impairment
      - Altered mental status
      - Distracting injury
      - Intoxication
3. Breathing:
   a. All open and/or sucking chest wounds should be treated by immediately applying an occlusive material to cover the defect and securing it in place. Monitor the casualty for the potential development of a subsequent tension pneumothorax. Tension pneumothoraces should be treated as described in ITC.
   b. Reassess casualties who have had chest seals applied or had needle decompression. If there are signs of continued or progressive respiratory distress:
      i. Consider repeating the needle decompression. If this results in improved clinical status, the decompression can be repeated multiple times.
   c. Administration of oxygen may be of benefit for all traumatically injured patients, especially for the following types of casualties:
      - Low oxygen saturation by pulse oximetry
      - Injuries associated with impaired oxygenation
      - Unconscious casualty
      - Casualty with TBI (maintain oxygen saturation > 90%)
      - Casualty in shock
      - Casualty at altitude
      - Casualties with pneumothoraxes

4. Bleeding:
   a. Fully expose wounds to reassess for unrecognized hemorrhage and control all sources of major bleeding.
   b. If not already done, use a tourniquet or an appropriate pressure dressing with deep wound packing to control life-threatening external hemorrhage that is anatomically amenable to such treatment.
      i. Apply the tourniquet directly to the skin 2-3 inches above wound.
      ii. For any traumatic total or partial amputation, a tourniquet should be applied regardless of bleeding.
   c. Reassess all tourniquets that were applied during previous phases of care. Expose the injury and determine if a tourniquet is needed.
      i. Tourniquets applied in prior phases that are determined to be both necessary and effective in controlling hemorrhage should remain in place if the casualty can be rapidly evacuated to definitive medical care.
      ii. If ineffective in controlling hemorrhage or if there is any potential delay in evacuation to care, identify an appropriate location 2-3 inches above the injury, and apply a new tourniquet directly to the skin. Once properly applied, the prior tourniquet can be loosened.
      iii. If delay to definitive care longer than 2 hours is anticipated and wound for which tourniquet was applied is anatomically amenable, attempt a tourniquet downgrade as described in ITC.
   d. A distal pulse check should be performed on any limb where a tourniquet is applied. If a distal pulse is still present, and bleeding continues consider additional tightening of the tourniquet or the use of a second tourniquet, side-by-side and proximal to the first, to eliminate the distal pulse.
   e. Expose and clearly mark all tourniquet sites with the time of tourniquet application. Use an indelible marker.
5. **Fluid resuscitation:** Reassess for hemorrhagic shock (altered mental status in the absence of brain injury, weak or absent peripheral pulses, and/or change in pulse character). If BP monitoring is available, maintain target systolic BP 80-90 mmHg.
   a. Establish intravenous or intraosseous access if not performed in ITC phase
   b. Management of resuscitation as in ITC with the following additions:
      i. If in shock and blood products are not available or not approved under scope of practice/local protocols resuscitate as in ITC.
      ii. Continue resuscitation as needed to maintain target BP or clinical improvement.
      iii. If a casualty with an altered mental status due to suspected TBI has a weak or absent peripheral pulse, resuscitate as necessary to maintain a desired systolic blood pressure of 90mmHg or a palpable radial pulse.
      iv. Suspected TBI and casualty not in shock, raise the casualty’s head to 30 degrees.

6. **Prevention of hypothermia:**
   a. Minimize casualty’s exposure to the elements. Move into a medic unit, vehicle, or warmed structure if possible. Keep protective gear on or with the casualty if feasible.
   b. Remove wet clothing. Replace with dry if possible. Place the casualty onto an insulated surface as soon as possible.
   c. Cover the casualty with commercial warming device, dry blankets, poncho liners, sleeping bags, or anything that will retain heat and keep the casualty dry.
   d. Warm fluids are preferred if IV fluids are required.

7. **Monitoring**
   a. Institute electronic monitoring if available, including pulse oximetry, cardiac monitoring, etCO2 (if intubated), and blood pressure.
   b. Obtain and record vital signs.

8. **Reassess casualty:**
   a. Complete secondary survey checking for additional injuries. Inspect and dress known wounds that were previously deferred.
   b. Determine mode and destination for evacuation to definitive care.
   c. Splint known/suspected fractures and recheck pulses.
   d. Apply pelvic binding techniques for suspected pelvic fractures.

9. **Provide analgesia as necessary.**
   a. Mild pain:
      i. Consider oral non-narcotic medications
      ii. Avoid the use of non-steroidal anti-inflammatory medications (e.g. aspirin, ibuprofen, naproxen, ketorolac, etc.) in the trauma patient as these medications interfere with platelet functioning and may exacerbate bleeding
10. Burns:
   a. Burn care is consistent with the principles described in ITC.
   b. Smoke inhalation, particularly in a confined space, may be associated with significant carbon monoxide and cyanide toxicity. Patients with signs of significant smoke inhalation plus:
      i. Significant symptoms of carbon monoxide toxicity should be treated with high flow oxygen if available
      ii. Significant symptoms of cyanide toxicity should be considered candidates for cyanide antidote administration
   c. Be cautious of off-gassing from patient in the evacuation vehicle if there is suspected chemical exposure (e.g. cyanide) from the fire.
   d. Consider early airway management if there is a prolonged evacuation period and the patient has signs of significant airway thermal injury (e.g. singed facial hair, oral edema, carbonaceous material in the posterior pharynx and respiratory difficulty.)

11. Prepare casualty for movement: Consider environmental factors for safe and expeditious evacuation. Secure casualty to a movement assist device when available. If vertical extraction required, ensure casualty secured within appropriate harness, equipment assembled, and anchor points identified.

12. Communicate with the casualty if possible and with the accepting facility. Encourage, reassure and explain care.

13. Cardiopulmonary resuscitation (CPR) may have a larger role during the evacuation phase especially for patients with electrocution, hypothermia, and non-traumatic arrest or near drowning. Consider bilateral needle decompression for victims of torso or polytrauma with no respirations or pulse to ensure tension pneumothorax is not the cause of cardiac arrest prior to discontinuation of care.

14. Documentation of Care: Continue or initiate documentation of clinical assessments, treatments rendered, and changes in the casualty’s status in accordance with local protocol. Forward this information with the casualty to the next level of care.

**Skills:**
1. Familiarization with advanced monitoring techniques
2. Familiarization with transfusion protocols
3. Ventilator and advanced airway management
EVACUATION CARE (EVAC):

URGENT PATIENT
- MAINTAIN C-SPINE IF INDICATED
- CONTROL LIFE-THREATENING HEMORRHAGE – APPLY TOURNIQUET AND/OR HEMOSTATIC AGENT IF INDICATED
- ASSESS AND MANAGE AIRWAY
- MAINTAIN O2 SATS >95%
- PERFORM RAPID TRAUMA ASSESSMENT TO FIND ADDITIONAL LIFE AND/OR LIMB-THREATENING INJURIES.
- TRANSPORT IMMEDIATELY (ALS INTERCEPT WHEN AVAILABLE)
- MONITOR VITAL SIGNS
  - HYPOPERFUSION (BP < 90 MMHG SYSTOLIC) OR ABSENT RADIAL PULSE
- OBTAIN MEDICAL HISTORY
- SPLINT FRACTURES IF TIME PERMITS
- REASSURE PATIENT
- REASSESS INTERVENTIONS

NON-URGENT PATIENT
- MAINTAIN C-SPINE IF INDICATED
- ASSESS AND MANAGE AIRWAY
- MAINTAIN O2 SATS >95%
- CONTROL HEMORRHAGE BY APPROPRIATE METHODS
- PERFORM FOCUSED EXAM ON INJURED AREA
- SPLINT FRACTURES
- MONITOR VITAL SIGNS
  - HYPOPERFUSION (BP < 90 MMHG SYSTOLIC) OR ABSENT RADIAL PULSE
- OBTAIN MEDICAL HISTORY
- REASSURE PATIENT
- REASSESS INTERVENTIONS
- TRANSPORT

IV NS (RUN TO MAINTAIN PERFUSION)
- MONITOR ECG
- CONSIDER PAIN MANAGEMENT PROTOCOL