

# Tactical Emergency Casualty Care (TECC) Guidelines

Current as of June 2015

## DIRECT THREAT (DT) / HOT ZONE CARE

### 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 post-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. Triage should be deferred to a later phase of care. Prioritization for extraction is based on resources available and the tactical situation.
4. Minimal trauma interventions are warranted.
5. *Consider* hemorrhage control
  - a. 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.
6. *Consider* quickly placing or directing casualty to be placed in position to protect airway.

### Direct Threat / Hot Zone Care Guidelines:

1. Mitigate any threat and move to a safer position (e.g. Return fire, utilize less lethal technology, assume an overwhelming force posture, extraction from immediate structural collapse, etc.).
2. Direct the casualty to *stay engaged* in any tactical operation if appropriate.
3. Direct the casualty to *move to a safer position* and apply self-aid if able.
4. *Casualty Extraction*
  - a. If a casualty can move to safety, they should be instructed to do so.

- b. 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.
  - c. If the casualty is *responsive* but cannot move, a tactically feasible rescue plan should be devised.
  - d. Recognize that threats are dynamic and may be ongoing, requiring continuous threat assessments.
5. *Stop life threatening external hemorrhage* if tactically feasible:
- a. Direct casualty to apply effective tourniquet if able
  - b. Apply the tourniquet over the clothing as proximal-- high on the limb-- as possible.
  - c. Tighten until cessation of bleeding and move to safety. Consider moving to safety prior to application of the TQ if the situation warrants.
  - d. For response personnel, tourniquet 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. Consider PACE Methodology- Primary, Alternative, Contingency, Emergency
  - b. Commercially available tourniquets
  - c. Field expedient tourniquets
- 2. Tactical casualty movement and extraction
- 3. Rapid placement in recover position

## INDIRECT THREAT (IDT) / WARM ZONE CARE

### Goals:

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

### Principles:

1. Maintain *tactical supremacy* and complete the overall mission.
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).
3. Conduct *dedicated patient assessment* and initiate appropriate life-saving interventions as outlined in the ITC guidelines. DO NOT DELAY casualty extraction/evacuation for non life-saving interventions.
4. Consider establishing a *casualty collection point* if multiple casualties are encountered
5. Unless in a fixed casualty collection point, triage in this phase of care should be limited to the following categories:
  - a. Uninjured and/or capable of self-extraction
  - b. Deceased / expectant
  - c. All others
6. Establish *communication* with the tactical and/or command element and request or verify initiation of casualty extraction/evacuation.
7. Prepare casualties for extraction and document care rendered for continuity of care purposes.

### Indirect Threat / Warm Zone Care 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. 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 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 (DO NOT APPLY OVER THE JOINT)

- ii. For any traumatic total or partial amputation, a tourniquet should be applied regardless of bleeding.
- b. Hemostatics: 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 along with an appropriate pressure bandage.
- c. Junctional control: If the bleeding site is not amenable to tourniquet application, cannot be controlled by direct pressure and hemostatics/dressings and a junctional tourniquet device is available, immediately apply a junctional tourniquet device in accordance with directions for its use.
- d. Reassess all tourniquets that were applied during previous phases of care. Consider exposing the injury and determining if a tourniquet is needed.
  - i. 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.
  - ii. 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.
  - iii. Before releasing any tourniquet on a casualty who has received IV fluid resuscitation for hemorrhagic shock, ensure a positive response to resuscitation efforts (e.g. improving mentation and peripheral pulses normal in character).
  - iv. If a tourniquet is not needed, use other techniques to control bleeding and remove the tourniquet.
- e. 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.
- f. 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. Supraglottic Devices (e.g. King LT, CombiTube, or LMA) per protocol.
  - ii. Surgical cricothyroidotomy (with lidocaine if conscious)
  - iii. Oro/nasotracheal intubation
- d. Consider applying oxygen if available

#### 4. Breathing:

- a. All open and/or sucking chest wounds should be treated by immediately applying a vented or non-vented occlusive seal to cover the defect.
- b. Monitor the casualty for the potential development of a subsequent tension pneumothorax (e.g. progressive respiratory distress, hypoxia, and/or hypotension in the setting of known or suspected torso trauma).
- c. If tension pneumothorax is present or developing, decompress the chest on the side of the injury. Needle decompression should be performed with a 14-gauge, 3.25 inch (8 cm) needle/catheter. Potential decompression techniques include:
  - i. Insertion 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. If properly trained and under an approved local protocol, consider a lateral decompression at the 4-5<sup>th</sup> intercostal space, anterior to the mid-axillary line on the injured side. The needle should be inserted perpendicular to the chest wall.
  - iii. Removing the occlusive dressing and “burping” the chest seal.

#### 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. Tranexamic Acid:

- a. If casualty is anticipated to need significant blood transfusion (e.g. presents

with hemorrhagic shock, one or more amputations, penetrating torso trauma, or evidence of severe bleeding) consider administration of 1 gram of TXA in 100cc NS or LR IV as soon as possible. Do not administer later than 3 hours after injury.

#### *7. Fluid Resuscitation:*

- a. Assess for hemorrhagic shock.
  - i. Altered mental status (in the absence of head injury) and weak/absent peripheral pulses are the best field indicators of shock.
  - ii. Abnormal vital signs (e.g. Systolic Blood Pressure (SBP) < 90mm Hg and Heart Rate > 100 bpm, or a shock index > 1 (HR/SBP).
- b. If not in shock:
  - i. No IV fluids necessary
  - ii. PO fluids permissible if:
    - Conscious, can swallow, and has no injury requiring potential surgical intervention
    - If confirmed long delay in evacuation to care
- c. 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 blood products are available, consider resuscitation with plasma (FFP) and packed red blood cells (PRBCs) in a 1:1 ratio.
  - 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 strong palpable radial pulse.

#### *8. Prevention of hypothermia:*

- a. Minimize casualty's exposure to the elements. Keep protective gear on or with the casualty if feasible.
- b. Replace wet clothing 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.

#### *9. Penetrating Eye Trauma:*

- a. If a penetrating eye injury is noted or suspected, protect the eye from external pressure and stabilize any impaled object to prevent movement during extraction.

#### *10. 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.

#### 11. *Analgesia:*

- a. Provide adequate analgesia as necessary for the injured.
  - i. Have naloxone readily available whenever administering opiates.
  - ii. Monitor for adverse effects such as respiratory depression or hypotension.
- b. For operational personnel:
  - i. If able to continue mission:
    - Consider oral non-narcotic medications such as Tylenol.
    - 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.
  - ii. If unable to continue the mission:
    - Consider oral non-narcotic medications for mild to moderate pain.
    - Consider use of narcotic medications (hydrocodone, oxycodone, transmucosal fentanyl citrate, etc.) and/or Ketamine (at analgesic dosages) for moderate to severe pain.
    - Consider adjunct administration of anti-emetic medicines.

#### 12. *Antibiotics:*

- a. Consider initiating antibiotic administration for casualties with open wounds and penetrating eye injury when evacuation to definitive care is significantly delayed or infeasible. This is generally determined in the mission planning phase and requires medical oversight.

#### 13. *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 under medical control 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.
  - f. All previously described casualty care interventions can be performed on or through burned skin in a burn casualty.
  - g. Analgesia in accordance with TECC guidelines may be administered.
  - h. Aggressively act to prevent hypothermia for burns greater than 20% TBSA.
14. *Monitoring:*
- a. Apply appropriate monitoring devices and/or diagnostic equipment if available. Obtain and record vital signs.
15. *Prepare casualty for movement:*
- a. Consider environmental factors for safe and expeditious evacuation.
  - b. Secure casualty to a movement assist device when available.
  - c. If vertical extraction required, ensure casualty secured within appropriate harness, equipment assembled, and anchor points identified.
16. *Communicate with the casualty if possible.*
- a. Encourage, reassure and explain care.
17. *Cardiopulmonary resuscitation:*
- a. 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.
    - i. 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.
  - b. 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.
18. *Documentation of Care:*
- a. Document 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.

- b. Consider implementing a casualty care card that can be quickly and easily completed by non-medical first responders.

**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
  - a. Initiate Casualty Monitoring
  - b. Establish Casualty Collection Point

*Note: Care provided within the ITC guidelines is based upon individual first responder training, available equipment, local medical protocols, and medical director approval.*

## EVACUATION (EVAC) / COLD ZONE CARE

### Goals:

1. Maintain any lifesaving interventions conducted during DTC and ITC phases
2. Provide rapid and secure extraction to a appropriate level of care
3. Avoid additional preventable causes of death

### Principles:

1. Reassess the casualty or casualties.
2. Utilize a triage system/criteria per local policy that considers priority AND destination.
3. Utilize additional resources to maximize advanced care.
4. Avoid hypothermia.
5. Communication is critical, especially between tactical and non-tactical EMS teams.
6. Maintain situational awareness- In dynamic events, there are NO threat free area (e.g. green or cold zone)

## Evacuation / Cold Zone Care 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/Rapid Sequence Intubation or surgical cricothyroidotomy (with lidocaine if conscious).
  - d. If intubated and attached to a mechanical ventilator, consider lung protective strategies and reassess for respiratory decline in patients with potential pneumothoraces.
  - 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.
  - ii. If appropriate provider scope of practice and approved local protocol, consider placing a chest tube if no improvement of respiratory distress after decompression if long duration or air transport is anticipated.
- 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 pneumothoraces

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, 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. Tranexamic Acid

If casualty is anticipated to need significant blood transfusion (e.g. presents with hemorrhagic shock, one or more amputations, penetrating torso trauma, or evidence of severe bleeding) consider administration of 1 gram of TXA in 100cc NS or LR IV as soon as possible. Do *not* administer later than 3 hours after injury. Begin second infusion of 1 gram of TXA after initial resuscitation.

6. *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 80-90mmHg.
  - 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. If in shock and blood products are available with an appropriate provider scope of practice under an approved medical protocol:
      - Resuscitate with 2 units of plasma (FFP) and 2 units of packed red blood cells (PRBCs) in a 1:1 ratio.
      - If blood component therapy is not available, and appropriate training, testing and protocols are in place, consider transfusing fresh whole blood.

- 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. If suspected TBI and casualty not in shock, raise the casualty's head to 30 degrees.
- 7. *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. Replace wet clothing 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. *Monitoring*
  - a. Institute electronic monitoring if available, including pulse oximetry, cardiac monitoring, etCO<sub>2</sub> (if intubated), and blood pressure.
  - b. Obtain and record vital signs.
- 9. *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.
- 10. If a penetrating eye injury is noted or suspected, protect the eye from external pressure and stabilize any impaled object to prevent movement during extraction.
- 11. *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
  - b. Moderate to severe pain:
    - i. Consider use of narcotic medications (hydrocodone, oxycodone, transmucosal fentanyl citrate, morphine, etc.) and/or Ketamine (at

analgesic dosages)

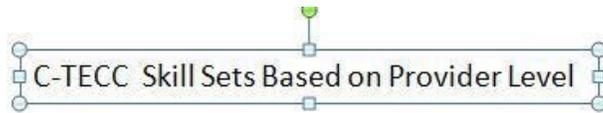
- i. Consider adjunct administration of anti-emetic medicines
- ii. Have naloxone readily available whenever administering opiates
- iii. Monitor for adverse effects such as respiratory depression, hypotension

12. *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.)
13. *Traumatic Brain Injury (TBI):* Prevention of hypotension and hypoxia are critical in management of TBI. During staging and evacuation, providers should apply appropriate monitoring equipment and interventions as described above.
14. *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.
15. *Communicate* with the casualty if possible and with the accepting facility. Encourage, reassure and explain care.
16. *Cardiopulmonary resuscitation (CPR)* may have a *larger role* during the evacuation phase especially for patients with electrocution, hypothermia, 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.
17. *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



Provider Level	Tourniquets**	Pressure Bandage w/ packing	Hemostatic Agents	Tourniquet De-escalation	Needle Thoracentesis	Surgical Airway	NPA	Blind Airway Insertion Device
LEO*	X	X	X				X	
EMR or equivalent	X	X	X		X***		X	X
EMT	X	X	X	X	X***		X	X
Advanced EMT	X	X	X	X	X	X***	X	X
Paramedic	X	X	X	X	X	X	X	X

\* Law Enforcement Officer; may have CPR/Basic First Aid Training.

\*\* Already included in NREMT skill sheets.

\*\*\* Only with proper training, specialized protocol and OMD approval. Ideally, this is a skill that should be performed by all providers, but need to prove safety and efficacy prior to inclusion of additional provider levels.

Other EMS/medical related skills such as patient assessment, chest seal placement, splinting, and hypothermia management should be considered standard for all levels of providers. Additional skills can be considered with specific agency approval.

