



Standard Operating Guideline	
SOG Name:	Active Shooter/Hostile Event Response (ASHER)
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Standard:	TBD
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PURPOSE: This document establishes guidelines for the Dothan Fire Department’s (DFD) response to an Active Shooter/Hostile Event Response (ASHER). The goal is to ensure coordination between agencies resulting in effective incident scene management, rapid patient triage, treatment, transportation, and evidence preservation while maintaining the safety of all emergency personnel.

A. GENERAL

Fire Department responses to active shooter and hostile/violent situations are becoming more frequent. Such incidents include, but are not limited to large scale complex incidents such as school shootings, workplace violence, and terrorist activities, as well as smaller scale/less complex incidents such as suicide attempts, single patient shootings and stabbings, domestic violence injuries and assaults.

The Active Shooter Incident (ASI) is one of the most complex and dangerous incident types that may occur. An active shooter incident may occur at any time or place. In recent years, there has been a significant increase in these types of events. These incidents differ greatly from routine incidents due to an increase in risk to the responders. Though it is the culture of the fire service to go into any situation in order to save lives, these hostile and violent situations require a different mindset in order to have a positive influence on the outcome.

The following is based upon existing best practices and sound principles. It centers on supporting the lead law enforcement agency (Dothan Police Department or Houston County Sherriff’s Office) and is nested in the Dothan Police Department’s Active Shooter/Hostile Response Plan, the safety of Dothan Fire Department personnel, and the rapid triage, treatment, and transportation of injured civilians. It follows the recommendations of *NFPA 3000 (PS), Standard for an Active Shooter/Hostile Event Response (ASHER) Program, 2018 Edition*.

B. DEFINITIONS

Active Assailant (AA). One or more individuals actively engaged in harming, killing, or attempting to kill people in a populated area with means other than the use of firearms.

Active Shooter (AS). One or more individuals actively engaged in harming, killing, or attempting to kill people in a populated area with the use of firearm(s).

Active Shooter Incident (ASI). An incident in which an armed person (shooter) who has used deadly physical force on other persons and continues to do so while having unrestricted access to additional victims.

Active Shooter/Hostile Events Response (ASHER). An incident where one or more individuals are or have been actively engaged in harming, killing, or attempting to kill people in a populated area by means such as firearms, explosives, toxic substances, vehicles, edged weapons, fire or a combination thereof.

Ambulance Exchange Point. A geographical location where transport vehicles are available to transport casualties. Usually located near the treatment area on the side farthest away from the Warm Zone.

Ballistic Protective Equipment (BPE). An item of personal protective equipment intended to protect the wearer from threats that could include ballistic threats, stabbing, fragmentation, or blunt force trauma.

Casualty. A person who is injured or killed at the incident, including as a result of responding to the incident.

Casualty Collection Point (CCP). A temporary location used for the gathering, triage (sorting), medical stabilization and subsequent evacuation of nearby casualties. Where vehicular access might be limited and is usually occurring in the warm zone.

Clear. A term used in law enforcement where a primary sweep has been conducted by law enforcement and no obvious threats have been found. Law enforcement might or might not maintain a physical presence in a cleared area. Victims might or might not be in a cleared area. DFD uses the term “All Clear” to report that all casualties in a room/area have been extricated.

Contact Team/Law Enforcement Entry Team. A team of law enforcement officers tasked with locating the suspect(s) and neutralizing the threat.

Containment. A law enforcement term that designates a perimeter position of target location(s) to control and isolate suspect movements.

Control Zones. The areas at ASHER incidents within an established perimeter that are designated based upon safety and the degree of hazard.

- a. Cold Zone. Areas where there is little to no threat due to geographic distance from the threat or the area has been secured by law enforcement. DFD will establish treatment/transport operations in the ASHER Cold Zone.
- b. Warm Zone. An area where there is the potential for a hazard or indirect threat of life that has been “cleared” by law enforcement. DFD will conduct triage/lifesaving treatment/extraction in the ASHER Warm Zone.
- c. Hot Zone. An area where there is a known hazard or direct immediate life threat. DFD will not conduct operations in an ASHER Hot Zone. Only DFD

personnel trained and assigned to the DPD Special Response Team (SRT) will function in this zone.

Evacuation Corridor. A pathway secured by law enforcement for the purpose of accessing and removing victims.

Extraction Strike Team/Litter Bearers. Personnel used to move the injured from the place of injury to the Treatment Area

Hazardous Device. A device placed or fabricated in an improvised or modified manner incorporating destructive, lethal, noxious, energetic, or incendiary materials and designed to destroy, incapacitate, harass, or distract.

Patient. A person who requires medical attention.

Protected Corridor Operations. A warm zone response concept in which law enforcement forms a secure path through which fire and EMS responders can care for and extract victims.

Protected Island Operations. A warm zone response concept in which law enforcement forms a secure perimeter around fire and EMS responders.

Secured. A law enforcement term for a geographic location where law enforcement has found no obvious threat and maintains a constant presence. This is an area where a secondary clear has not yet occurred.

Threat-Based Care. Medical care provided as determined by the security/threat conditions that are present.

Treatment Area. Location in the Cold Zone for the treatment of victims after extraction and triage, prior to loading for transport to definitive care. Location in which more advanced medical interventions may be performed.

Triage. To sift or sort; can occur in multiple phases and is constant and reoccurring.

Unified Command. An authority structure in which the role of incident commander is shared by individuals from all responding organizations responsible for the incident, operating together to develop a single incident action plan. During an ASHER incident, Unified Command generally consists of law enforcement, fire, and EMS representatives at a minimum.

Victim. A person who is directly or proximately harmed in the incident/crime and is used by law enforcement for the purpose of classification of crimes.

C. GENERAL PROCEDURES

1. Unified Command will be established between the Lead Law Enforcement Agency and the DFD as soon as possible.
2. Currently, Dothan Communications will dispatch a single engine and an ambulance to a “Firearm Assault with multiple casualties.” The Captain or Battalion Chief will increase the level of response if the dispatch information warrants and increase. Dothan Communications is developing a new dispatch protocol that will be specifically for ASHER. When this new protocol is completed, this protocol will be added to the SOG and a memorandum of change will be published to inform all DFD personnel.
3. Initial arriving Chief Officer will report to the Law Enforcement Command post. If the initial arriving Chief Officer is delayed, he/she will designate a Company Officer to assume responsibility.
4. All dispatched fire and EMS units will report to a designated staging area (Level II Staging) and will not move to the incident scene until directed to do so by Unified Command. If a staging area is not designated, fire and EMS units will conduct Level I Staging in a location that is safe from a high threat of violence; and that allows for maximum flexibility as it relates to approach and assignment.
5. The Chief Officer in the Unified Command Post will be known as Fire Operations (Fire Ops).
6. Fire Ops will obtain a briefing on the current situation and plan. Fire Ops will share this information with all responding DFD personnel using the CAN format. Due to the nature of the incident, this should be done face to face before tactical assignments are given. Critical briefing items are: Conditions, Actions, Needs, and the Hot, Warm, and Cold Zones locations and boundaries.
7. Fire Ops will establish a Medical Operations Branch by assigning a Medical Branch Director.
8. The Medical Branch Director is responsible for all medical response at the incident site.
9. The Medical Branch Director will assign a Triage Group Supervisor, a Treatment Group Supervisor, and a Transportation Group Supervisor as needed.
10. No DFD personnel will enter the incident until Law Enforcement has established the Hot, Warm, and Cold Zones and these boundaries are announced by the Unified Command.
11. Personnel functioning within the protected corridor (Warm Zone) work under the direction of the Triage Group Supervisor and follow Threat-Based Care procedures (See Appendix A)
12. Personnel functioning at the cold zone treatment area (Casualty Collection Point) and the transportation area work under the direction of the Treatment Group Supervisor and follow normal Mass Casualty Procedures as outlined in DFD SOG 100.13 *Mass Casualty Incidents*.
13. Upon the lead law enforcement agency declaring the incident site secure (with all threats of violence removed or neutralized, the DFD will revert to DFD SOG 100.13 *Mass Casualty Incidents* for the remainder of the incident.

D. OPERATIONS—WARM ZONE

1. Triage Group Supervisor (TGS). A Dothan Fire Department member that is assigned by the Medical Branch Director to oversee the triage, threat-based care and extraction provided to victims in the warm zone. The TGS is to be stationed at or near the entry point into the warm zone (or structure entrance) in order to maintain accountability of triage/extraction strike teams, assign specific tactical tasks to triage/extraction strike teams entering the warm zone, maintain communication with triage/extraction strike teams in the warm zone, and track the number and location of victims until they arrive at the cold zone. The TGS will monitor conditions and maintain a high level of situational awareness by observation and communication with the Law Enforcement Interior Division Supervisor as well as all triage/extraction strike teams. The TGS will maintain communications with the Medical Branch Director to ensure the treatment area (Casualty Collection Point) is kept informed of number of victims, triage priority status and estimated time until extraction.

The TGS must keep Unified Command (through the Medical Branch Director) updated with rescue team progress; this is to include threats encountered, patients triaged, and patients extricated in order that Unified Command has an accurate understanding of conditions and patients.

When possible, it is recommended that the TGS have an aide. The Warm Zone will have a high level of activity and a tremendous amount of communications in the work area. The TGS Aide (if assigned) will manage accountability of personnel working in the Warm Zone, PAR Checks, and maintain current number of victims triaged and number of victims extricated to the Cold Zone.

All personnel assigned to function in the Warm Zone during an ASHER incident will report to the TGS for tactical-level taskings.

2. Triage Strike Team Leader. As needed, the TGS will assign personnel to Triage Strike Teams. If the TGS establishes a strike team, a member of the Strike Team must be designated to function as that Strike Team's Leader.

The Triage Strike Team Leader is responsible for managing the members of his assigned Triage Strike Team while functioning in the Warm Zone. The Triage Strike Team Leader moves with the assigned Triage Strike Team in order to provide operational oversight for the assigned Triage Strike Team.

The Triage Strike Team Leader will report locations of the Triage Strike Team, location of victims, as well as triage classification numbers to the Triage Group Supervisor. The Triage Strike Team Leader will report to the TGS when the Triage Strike Team enter a room/area and when the Triage Strike Team has completed triage and moved from the room area. This report should be in the CAN format and include location (room number, etc.), number of victims in that

location, number and classification (green, red, yellow, black) of victims triaged and any needs the Triage Teams have.

Example Report:

“Triage Team 1 to Triage Group Supervisor CAN Report” “TGS to Triage Team 1, Go ahead with the CAN Report” Triage Team 1 to Triage Group Supervisor, CAN Report follows: Room 4 has been triaged. There are 12 total casualties, with 4 Red, 2 Yellow, 5 Green, and 1 Black. Triage Team 1 continuing triage of Northwest Hall in Building 2 moving to Rooms 5 and 6. We need Extraction Teams in Room 4.

Once the report is given, the Triage Strike Team may be assigned further areas to triage, reassigned as an Extraction Strike Team or reassigned to Treatment Group based upon operational needs.

Unless a Mayday situation arises, only the Triage Strike Team Leader should communicate over the radio. All other DFD members assigned to a Triage Strike Team should be on radio listening silence with radios on the channel assigned to the Triage Group.

3. Triage Strike Team. DFD members assigned to conduct triage are responsible to conduct a rapid, systematic, primary trauma triage of all persons located within their assigned geographical area under the direct supervision of their Triage Strike Team Leader.

DFD members assigned to a Triage Strike Team will function in teams of a minimum of 2 personnel for each team. Triage Teams will be identified as Triage Team 1, Triage Team 2, and so forth as assigned by the TGS. Each Triage Strike Team will have an assigned Triage Strike Team Leader.

All DFD personnel will wear appropriate PPE that clearly identifies them as DFD personnel.

Each Triage Strike Team will leave their accountability “passport” with the TSG prior to beginning their assignment.

Each Triage Strike Team will carry a triage kit and conduct triage using the current DFD mass casualty triage system procedures with the addition of medical interventions as prescribed in NFPA 3000, Chapter 13.3.2 “Threat Based Care—Warm Zone Tasks.” For specifics treatment guidelines see “Tactical Emergency Casualty Care (TECC) Guidelines for BLS/ALS Medical Providers: Indirect Threat Care (ITC)/Warm Zone Guidelines (Appendix A of this SOG)

4. Extraction Strike Team Leader. As needed, the TGS will assign personnel to Extraction Strike Teams. If the TGS establishes a strike team, a member of the Strike Team must be designated to function as that Strike Team’s Leader.

The Extraction Strike Team Leader is responsible for managing the members of his assigned Extraction Strike Team while functioning in the Warm Zone. The Extraction Strike Team Leader moves with the assigned Extraction Teams in order to provide operational oversight for the assigned Extraction Strike Team.

The Extraction Strike Team Leader will report to the TGS when the Extraction Strike Team enters a room/area and begins extracting patients. This report should be as simple as reporting the Strike Team arriving at assigned location. When a patient is packaged and the Extraction Team begins to move the patient, the Extractions Strike Team Leader will report to the TGS the locations of Extraction Team as well as patient ID Number and triage classification.

The Extraction Strike Team Leader will report to the TGS when all victims have been removed from a room/area by announcing that the room/area is "Clear". All reports to the TGS should be in the CAN format.

Example Report:

"Extraction Team 1 to Triage Group Supervisor CAN Report" "TGS to Extrication Team 1, Go ahead with the CAN Report" "Extrication Team 1 to Triage Group Supervisor, CAN Report follows: Room 4 has been cleared. We have removed 11 total casualties 7 non-ambulatory and 4 ambulatory. 1 deceased was left in place per DPD Interior Division Supervisor. Extraction Team 1 continuing extrication of Northwest Hall in Building 2 moving to Rooms 5 and 6. 2 personnel returning to obtain more extraction tarps."

Unless a Mayday situation arises, only the Extraction Strike Team Leader should communicate over the radio. All other DFD members assigned to an Extrication Strike Team should be on radio listening silence with radios on the channel assigned to the Triage Group.

5. Extraction Strike Team. DFD members assigned to conduct extraction are responsible to conduct a rapid, systematic, extraction of victims located within their assigned geographical area under the direct supervision of their Extraction StrikeTeam Leader. Extraction should be conducted with the victims from the warm zone to the treatment area in the cold zone based upon triage category in the following order: Immediate/Red, followed by Delayed/Yellow. Minor/Green triaged victims should be escorted from the warm zone to the treatment area in groups as each room/area is cleared.

DFD members assigned to an Extraction Strike Team will function in teams of a minimum of 2 personnel for each team. Extraction Teams will be identified as Extraction Team 1, Extraction Team 2, and so forth as assigned by the TGS. Each Extraction Strike Team will have an assigned Extraction Strike Team Leader.

All DFD personnel will wear appropriate PPE that clearly identifies them as DFD personnel.

Each Extraction Strike Team will leave their accountability “passport” with the TGS prior to beginning their assignment.

Each Extraction Team will carry portable lifting/extraction devices such as patient tarps, sked stretchers, etc. and conduct victim extraction using current DFD extraction procedures as taught during ASHER/TECC training events.

E. OPERATIONS—COLD ZONE

1. Treatment Group Supervisor (TxGS). A fire department member that is assigned by Medical Branch Director to oversee the Cold Zone medical treatment and transportation of all victims extricated from the warm zone. The TxGS is to be stationed at or near the entry point into the warm zone in order to maintain accountability of treatment and transportation personnel, assign specific tactical tasks to treatment and transportation teams, maintain communication with the Triage Group Supervisor and the Transportation Officer as well as the Medical Branch Director. The TxGS will monitor conditions and maintain a high level of situational awareness regarding number of victims within the warm zone, number of victims in the treatment area, and number of victims transported to various medical facilities. Additionally, the TxGS will seek to anticipate future treatment/transportation needs in order to secure needed resources without delaying patient treatment and transportation.

The TxGS must keep Unified Command (through the Medical Branch Director) updated with Treatment Group progress; this is to include number and criticality of patients received in the treatment area, number of patients transported, a running estimate of number of ambulances needed to complete transportation of all victims, an estimated time to clear treatment area of all victims, and area hospital saturation rates in order that Unified Command has an accurate understanding of conditions and patients.

The TxGS should follow Dothan Fire Department Mass Casualty Incidents SOG (100.13) for organization and operational procedures in the Cold Zone.

All personnel assigned to function in the Treatment Group during an ASHER incident will report to the TxGS for tactical-level taskings.

(Signature On File)

Larry H. Williams, Jr.

Fire Chief

DOTHAN FIRE DEPARTMENT

APPENDIX A

Taken from Tactical Emergency Casualty Care (TECC) Guidelines for BLS/ALS Warm Zone Guidelines dated May 2017

INDIRECT THREAT CARE (ITC) / WARM ZONE Guidelines:

Care provided should be based upon individual first responder scope of practice/training, available equipment, local medical protocols, and medical director approval.

1. Any injured person or responder with a weapon should have that weapon made safe/secured once the threat is neutralized and/or if mental status is altered.

2. Major Bleeding:

a. Assess for and control all sources of major bleeding:

i. Use a tourniquet or an appropriate pressure dressing with deep wound packing (either plain gauze or, if available, hemostatic gauze) to control life-threatening external hemorrhage that is anatomically amenable to such treatment.

- *Tourniquet application:* Apply the tourniquet over the clothing as proximal as possible and tighten as much as possible, or if situation allows, consider fully exposing and evaluating the extent of the wound before applying tourniquet directly to the skin 2-3 inches above wound (DO NOT APPLY OVER THE JOINT) and tightening as much as possible.

- *Pressure dressing application:* apply directly to the skin after the wound has been packed with either plain or hemostatic gauze to translate the surface pressure exerted by the bandage to the bleeding vessels deep in the wound.

- For any traumatic total or partial amputation, a tourniquet should be applied in an appropriate location regardless of bleeding

b. If major bleeding is in anatomic junctional area where that bleeding cannot be easily controlled by direct pressure and hemostatics/dressings, apply a junctional tourniquet device if immediately available.

c. Reassess all tourniquets that were applied during Direct Threat/Hot Zone Care. Consider checking a distal pulse, or if the situation allows, fully exposing the injury to evaluate the wound for effective hemorrhage control and to determine if the tourniquet is needed.

i. Tourniquets that are determined to be both *necessary and effective* in controlling hemorrhage should remain in place if the patient can be evacuated within 2 hours to definitive medical care.

ii. If existing tourniquet is *necessary but ineffective* (continued bleeding or a palpable distal pulse), either tighten the existing tourniquet further, or apply a second tourniquet, side-by-side and, if possible, proximal to the first to eliminate the distal pulse.

- iii. If a tourniquet is determined based on wound assessment *to not be necessary*, use other techniques to control bleeding and remove the tourniquet.
- d. Consider tourniquet downgrade or tourniquet conversion if there will be a delay in evacuation more than 2 hours. On any patient who is receiving resuscitation for hemorrhagic shock, ensure a positive response to resuscitation efforts (e.g. improving mentation and peripheral pulses normal in character) before downgrading or converting a tourniquet. Criteria for tourniquet downgrade or conversion:
 - Patient not in hemorrhagic shock
 - Able to subsequently monitor wound closely
 - TQ is not on an amputated or partially amputated limb
 - No prior unsuccessful attempts to remove the TQ
 - i. Downgrade: Expose the wound fully, identify an appropriate location at least 2-3 inches above the injury (not over a joint), and apply a new tourniquet directly to the skin. Once properly applied, the prior tourniquet can be loosened but should be left in place. Assess for bleeding.
 - ii. Conversion: Expose the wound fully, fully pack the wound with hemostatic or plain gauze, and properly apply a pressure dressing. Once properly applied, the prior tourniquet can be loosened but should be left in place. Assess for bleeding.
 - iii. If a tourniquet downgrade/conversion fails, it should not be attempted multiple times.
- e. Expose and clearly mark all tourniquet sites with the time of tourniquet application.

3. Airway Management:

- a. If the patient is conscious and able to follow commands:
 - i. Allow the patient to assume any position of comfort. Do not force to lie down.
- b. If the patient is unconscious or conscious but unable to follow commands:
 - i. Clear mouth of any foreign bodies (vomit, food, broken teeth, gum, etc.).
 - ii. Apply basic chin lift or jaw thrust maneuver to open airway.
 - iii. Consider placing a nasopharyngeal airway.
 - iv. Place patient in the recovery position to maintain the open airway.
- c. If previous measures are unsuccessful and equipment is available under an approved protocol, consider:
 - i. Supraglottic Devices (e.g. King LT, LMA, iGel)
 - ii. Oro/nasotracheal intubation
- d. Consider applying oxygen if available.

4. Respirations/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 any patient with penetrating torso trauma for the development of a subsequent tension pneumothorax. The most common presentation will be a penetrating chest injury with subsequent progressive dyspnea/respiratory distress, hypoxia and/or hypotension, and/or increasing anxiety/agitation, often after the application of an occlusive chest seal.

c. If tension pneumothorax is suspected to be present or developing, decompress the chest on the side of the injury. Needle decompression should be performed with at minimum a 14-gauge, 3.25-inch needle/catheter. Potential decompression sites/procedures include:

- i. Anterior decompression: Insert the needle in the 2nd or 3rd 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. Non-invasive decompression: remove the occlusive dressing and physically “burp” the chest seal.

5. Intravenous (IV) Access:

If immediate fluid resuscitation is required and is available, consider starting at least an 18-gauge IV or obtaining intraosseous (IO) access.

6. Shock Management/Fluid Resuscitation:

a. Assess for developing hemorrhagic shock

- i. Altered mental status (in the absence of head injury) and weak or absent peripheral pulses are the best austere field indicators of shock.
- ii. If equipment available, assess for abnormal vital signs (e.g. systolic blood pressure (SBP) <90mmHg with/without heart rate >100 bpm) or a shock index >1 (HR/SBP)

b. If not in hemorrhagic shock:

- i. Patient may drink if conscious, can swallow, and there is a confirmed delay in evacuation to care.
- ii. No IV fluids necessary but consider intravascular access with saline lock.

c. If hemorrhagic shock is present:

- i. Resuscitate using permissive hypotension in the non-head injured patient. Administer IV fluid bolus (per agency protocol) to a goal of improving mental status, radial pulses, or, if monitoring is available, measured SBP>80mmHg. Repeat bolus once after 30 minutes if still in shock.

d. In a patient who has altered mental status due to suspected or confirmed traumatic brain injury, avoid any hypotension.

- i. Resuscitate aggressively with fluid boluses to a goal of improving mental status, strong peripheral pulses or, if monitoring is available, maintain measured SBP>90-100 mmHg.
- ii. Position patient with head elevated 30 degrees if possible.

e. Prioritize for rapid evacuation any patient with traumatic brain injury or any patient, especially those with penetrating torso injury, that is displaying signs of shock.

7. Prevention of Hypothermia:

- a. Minimize patient's exposure to the elements and subsequent heat loss.
 - i. Avoid cutting off or removing clothes unless absolutely necessary for wound evaluation.
 - ii. For public safety casualties, keep protective gear on or with the patient if feasible.

- b. Keep the patient covered, warm and dry.
 - i. Place the patient onto an insulated surface as soon as possible to decrease conduction from cold ground temperatures.
 - ii. Minimize exposure to the elements.
 - iii. Replace wet clothing with dry if possible.
 - iv. Cover the patient with dry blankets, jackets, poncho liners, sleeping bags, commercial warming devices or anything that will retain heat and assist in keeping the patient dry.
 - v. Warm fluids are preferred if IV fluids are administered.

8. Reassess Patient:

- a. Perform a rapid blood sweep/secondary survey, front and back, checking for additional injuries. Tearing or cutting clothes, or otherwise exposing the wound may be necessary.

- b. Inspect and consider dressing known wounds that were deferred for treatment in earlier steps of Indirect Threat Care.

- c. Consider splinting known/suspected fractures, including the application of pelvic binding devices/techniques for suspected pelvic fractures.

9. Analgesia

- a. Provide adequate analgesia as necessary for the patient.
 - i. For moderate – severe pain, consider use of narcotic medications (fentanyl and/or Ketamine at analgesic dosages). Sedating medications require increased level of monitoring.
 - Have naloxone readily available whenever administering opiates.
 - Monitor for adverse effects such as respiratory depression or hypotension. Consider the effect of opioid-induced altered mental status on subsequent operations and required resources.
 - Consider adjunct administration of anti-emetic (Zofran) medicines.

10. Burns:

- a. Stop the burning process.

- b. Cover the burn area with dry, sterile dressings and initiate aggressive measures to prevent heat loss and hypothermia.

- c. Facial burns, especially those that occur in closed spaces, are likely associated with inhalation injury. Aggressively monitor airway status and, if available, oxygen saturation in such patients

and consider early definitive airway management for respiratory distress, oxygen desaturation, or other signs of inhalational injury (e.g. hoarseness, stridor, throat pain).

d. Smoke inhalation, particularly in a confined space, may be associated with significant carbon monoxide and cyanide toxicity.

- i. Significant symptoms of smoke inhalation and carbon monoxide toxicity should be treated with high flow oxygen if available.
- ii. Significant symptoms of smoke inhalation and cyanide toxicity should be considered candidates for cyanide antidote administration.

e. Estimate total body surface area (TBSA) burned to the nearest 10% using the appropriate locally approved burn calculation formula.

- i. If burns are greater than 20% of Total Body Surface Area, fluid resuscitation should be initiated as soon as IV/IO access is established.
- ii. If hypotension is also present, fluid resuscitation as per the guidelines #7. Permissive hypotension resuscitation principles for hemorrhagic shock take precedence over burn resuscitation.

f. All previously described patient care interventions can be performed on or through burned skin in a burn patient.

g. Analgesia in accordance with TECC guidelines #10 should be administered.

11. Monitoring:

a. Apply appropriate monitoring devices and/or diagnostic equipment if available. Obtain and record vital signs.

12. Prepare Patient for Movement:

a. Consider environmental factors for safe and expeditious evacuation.

b. Secure patient to a movement assist device when available.

c. If vertical extraction required, ensure patient is secured appropriately.

13. Communicate with the patient if possible.

a. Encourage, reassure and explain care.

14. Cardiopulmonary Resuscitation:

a. CPR within this phase of care for victims of blast, penetrating or blunt trauma who have no pulse, no ventilations, and no other signs of life will likely not be successful and should not be attempted.

- i. 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 other circumstances, performing CPR *may be* of benefit and should be considered in the context of the operational situation.

15. Documentation of Care:

a. Document clinical assessments, treatments rendered, and changes in the patient's status in accordance with local protocol. Forward this information with the patient to the next level of care.

EVACUATION CARE (EVAC)/ COLD ZONE Guidelines*

1. All Cold Zone EMS operations will be conducted in accordance with DFD SOG 100.13 *Mass Casualty Incidents*
2. Reassess All Interventions applied in previous phases of care.
 - a. If multi-patient event, perform primary triage per local protocols for priority and destination.
3. Airway Management:
 - a. The principles of airway management in Evacuation Care / Cold Zone are the same as that in Indirect Threat Care / Warm Zone with the addition of increased utility of supraglottic devices and definitive airway control with endotracheal intubation.
 - b. Consider applying oxygen if available.
 - c. Consider the mechanism of injury and the need for spinal motion restriction.
 - i. Routine spinal immobilization is not recommended and may be harmful for casualties with penetrating trauma.
 - ii. Maintain high clinical suspicion for casualties over age of 65yo with blunt mechanism.
 - iii. Adequate spinal motion restriction may be maintained by keeping the patient calm, coaching of the patient to limit movement and by positioning in a supine position on a firm surface.
 - iv. Patients may be clinically cleared using ADPH Protocol.
4. Respirations/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 patient for the potential development of a subsequent tension pneumothorax. Tension pneumothoraces should be treated as in ITC / Warm Zone.
 - i. Symptoms include, but are not limited to, progressive respiratory distress, hypoxia and/or hypotension in the setting of known torso trauma
 - c. Reassess casualties who have had chest seals applied or had needle decompression. if there are signs of continued or progressive respiratory distress:
 - i. Consider repositioning the patient, burping the chest seal or repeating the needle decompression. If this results in improved clinical status, the decompression can be repeated multiple times.
 - ii. 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 patient
 - ⇒ Patient with traumatic brain injury (maintain oxygen saturation > 90%)
 - ⇒ Patient in shock
 - ⇒ Patient at altitude
 - ⇒ Patient with known/suspected pneumothorax

5. Major Bleeding:

- a. Assess for any unrecognized or untreated 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.
 - Tourniquet application: Apply the tourniquet directly to the skin 2-3 inches above wound (DO NOT APPLY OVER THE JOINT) and tighten as much as possible.
 - Pressure dressing application: apply directly to the skin after the wound has been packed with either plain or hemostatic gauze to translate the surface pressure exerted by the bandage to the bleeding vessels deep in the wound. - For any traumatic total or partial amputation, a tourniquet should be applied in an appropriate location regardless of bleeding.
 - Expose and clearly mark all tourniquets with time of application.
- b. Re-assess effectiveness and clinical indications for all tourniquets that were applied during previous phases of care.
 - i. Tourniquets that are determined to be both clinically indicated and effective in controlling hemorrhage should remain in place if the patient can be evacuated within 2 hours to definitive medical care.
 - ii. If existing tourniquet is clinically indicated but ineffective (continued bleeding or a palpable distal pulse), either tighten the existing tourniquet further, or apply a second tourniquet, side-by-side and, if possible, proximal to the first to eliminate the distal pulse.
 - iii. If a tourniquet is determined based on wound assessment to not be clinically indicated, use other techniques to control bleeding and remove the tourniquet.
- c. Consider tourniquet relocation, downgrade, or conversion if there will be a delay in evacuation more than 2 hours. On any patient who is receiving fluid resuscitation (including blood products) for hemorrhagic shock, ensure a positive response to resuscitation efforts (e.g. improving mentation and peripheral pulses normal in character) before downgrading/converting a tourniquet. Criteria for tourniquet downgrade/conversion:
 - Patient is not in hemorrhagic shock
 - Able to subsequently monitor wound closely
 - TQ is not on an amputated or partially amputated limb
 - No prior unsuccessful attempts to remove the TQ
 - i. Downgrade: Expose the wound fully, identify an appropriate location at least 2-3 inches above the injury (not over a joint), and apply a new tourniquet directly to the skin. Once properly applied, the prior tourniquet can be loosened but should be left in place. Assess for bleeding.
 - ii. Conversion: Expose the wound fully, fully pack the wound with hemostatic or plain gauze, and properly apply a pressure dressing. Once properly applied, the prior tourniquet can be loosened but should be left in place. Assess for bleeding.

- iii. Tourniquet relocation: Expose the wound fully, identify an appropriate location at least 2-3 inches above the injury (not over a joint), and apply a new tourniquet directly to the skin. Once properly applied, the prior tourniquet can be loosened but should be left in place. Assess for bleeding.
 - iv. If a tourniquet downgrade/conversion fails, it should not be attempted multiple times.
6. Shock Management / Fluid resuscitation:
- a. Reassess for hemorrhagic shock (altered mental status in the absence of brain injury, weak or absent peripheral pulses, and/or change in pulse character). In this phase, BP monitoring should be available. If so, maintain target systolic BP above 80-90mmHg.
 - b. Establish intravenous or intraosseous access if not performed in Indirect Threat Care / Warm Zone phase.
 - c. Management of resuscitation as in Indirect Care/Warm Zone with the following additions:
 - i. if in hemorrhagic shock and blood products are not available or not approved under scope of practice/local protocols, fluid resuscitate as in ITC/Warm Zone.
 - ii. Continue resuscitation as needed to maintain target BP or clinical improvement.
 - d. In a patient who has altered mental status due to suspected or confirmed traumatic brain injury, avoid any hypotension.
 - i. Resuscitate aggressively with fluid boluses to a goal of improving mental status, strong peripheral pulses or, if monitoring available, maintain measured SBP>90/100 mmHg.
 - ii. Position patient with head elevated 30 degrees if possible.
7. Prevention of Hypothermia:
- a. Minimize patient's exposure to the elements. Move into a medic unit, vehicle, or warmed structure if possible. Avoid cutting off or removing clothes unless necessary for wound exposure.
 - i. For public safety casualties, keep protective gear on or with the patient if feasible.
 - b. Replace wet clothing with dry if possible.
 - c. Place the patient onto an insulated surface as soon as possible to decrease conductive heat loss to the cold ground.
 - d. Cover the patient with dry blankets, jackets, poncho liners, sleeping bags, commercial warming devices or anything that will retain heat and keep the patient dry.
 - e. Warm fluids are preferred if IV fluids are required.
8. Monitoring
- a. Institute electronic monitoring if available, including pulse oximetry, cardiac monitoring, etCO₂ (if intubated), and blood pressure.
 - b. Obtain and record vital signs.
9. Reassess Patient:
- 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 or device for suspected unstable pelvic fractures.

10. Provide Analgesia as Necessary:

- a. Provide adequate analgesia as necessary for the casualties:
 - i. Have naloxone readily available whenever administering opiates.
 - ii. Monitor for adverse effects such as respiratory depression or hypotension. Consider the effect of opioid-induced altered mental status on subsequent operations and required resources.
 - iii. For moderate – severe pain, consider use of narcotic medications (hydrocodone, oxycodone, fentanyl, etc.) and/or Ketamine (at analgesic dosages). Sedating medications require increased level of monitoring.
 - iv. Consider adjunct administration of anti-emetic medicines (zofran)

11. Burns:

- a. Burn care and resuscitation is consistent with the principles described in Indirect Threat Care / Warm Zone.
- b. Smoke inhalation, particularly in a confined space, may be associated with significant carbon monoxide and cyanide toxicity.
 - i. Significant symptoms of smoke inhalation and carbon monoxide toxicity should be treated with high flow oxygen if available.
 - ii. Significant symptoms of smoke inhalation and 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 the patient has signs of significant airway thermal injury (e.g. oral edema, hoarseness, stridor, throat pain, carbonaceous material in the posterior pharynx and respiratory difficulty) or if there is a prolonged evacuation period.

12. Traumatic Brain Injury (TBI):

- a. Prevention of hypotension and hypoxia are critical in management of TBI.
- b. TBI patients should have available monitoring equipment applied and should be resuscitated to a minimum SBP > 90-100mmHg.
- c. Raise the head of the bed or stretcher 30 degrees if patient is not in hemorrhagic shock.

13. Prepare Patient for Movement:

- a. Consider environmental factors for safe and expeditious evacuation.
- b. Secure patient to a movement assist device when available.
- c. If vertical extraction required, ensure patient secured appropriately.

14. Communicate with the patient if possible and with the receiving facility.

- a. Encourage, reassure and explain care to patient.
- b. Notify receiving facility of wounds, patient condition, and treatments applied.

15. Cardiopulmonary Resuscitation:

- a. CPR may have a larger role during the evacuation phase especially for patients with electrocution, hypothermia, non-traumatic arrest or near drowning.

- b. 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.

16. Documentation of Care:

- a. Continue or initiate documentation of clinical assessments, treatments rendered, and changes in the patient's status in accordance with local protocol.
- b. Forward this information with the patient to the next level of care.

APPENDIX B
Model ASHER Incident Command Structure
“Worst Case Scenario”

