OFFICE OF THE
MEDICAL DIRECTOR
EMERGENCY PHYSICIANS ADVISORY BOARD

FORT WORTH

Fort Worth PD Tactical Medic Unit

Protocols & Procedures

The Uniform EMS Ordinance, and related Interlocal Agreements, establish the Area Metropolitan Ambulance Authority, dba MedStar Mobile Healthcare. In conjunction with each member city's fire or police EMS first-response, the MedStar System provides service to more than 936,000 residents over 436 square miles, and responds to approximately 125,000 emergency calls a year. The mission is to provide high quality patient care in an efficient, accountable, and cost effective fashion. To ensure a high standard of clinical care for the System, the Ordinance also establishes the Emergency Physicians Advisory Board (EPAB) to provide medical direction and oversight to the entire system.

These protocol's jurisdictional authority pertains to the following members of the MedStar System:

→ Fort Worth Police Department Tactical Medic Unit

These protocols apply only during official responses within the member jurisdictions, to personnel who are considered to be "On-Duty" by their respective agencies. Agencies responding to mutual aid requests are expected to operate under them as well.

In the case of a regional disaster, providers who normally operate under these protocols will continue to do so, regardless of the location of the disaster, until other instructions can be provided.

Questions regarding the applicability of this document within any specific jurisdiction or for a particular event should be directed to the EPAB office by calling 817-923-1500 or in writing to the following address:

Office of the Medical Director
Emergency Physicians Advisory Board
2900 Alta Mere Drive
Fort Worth, Texas 76116

Effective:
October 1, 2018

Veer Vithalani, M.D., FACEP FAEMS
Interim-Medical Director

Medical Direction and Oversight of the system includes the following components:

Emergency Physicians Advisory Board

The EPAB was created pursuant to the Uniform EMS Ordinance and adopted by each of the Member Jurisdictions. The EPAB is empowered to promulgate the clinical standards, rules, and regulations of ambulance and first responder services within the Service Area. The EPAB is composed of the System area hospital Emergency Department Medical Directors and additional licensed physicians appointed by the Tarrant County Medical Society. The EPAB powers and duties are defined in the Uniform EMS Ordinance.

Medical Director

The Medical Director is appointed by the EPAB to serve as the administrative officer in carrying out the duties and powers of the EPAB. The Medical Director is responsible for all aspects of clinical care for the System, including establishing clinical care requirements, credentialing standards, training & education, quality improvement processes, and research. The EPAB collaboratively reviews changes for medical appropriateness and consistency with sound medical practice. All medical protocols must be approved by the Medical Director. The Medical Director's power and duties are defined in the Texas Medical Board Rules in the Texas Administrative Code, Title 22, Part 9, Chapter 197-Emergency Medical Service, and in a Professional Services Contract.

Office of the Medical Director

The Medical Director may appoint members of staff to aid in the provision of medical direction and oversight, which may include physician (Associate/Assistant Medical Directors), and non-physician staff. The Medical Director may delegate certain tasks and responsibilities to this staff. The selection, hiring, separation, and day-to-day direction of members of this staff solely resides with the EPAB and the Medical Director.

Medical Directives

Medical Directives are issued by the Medical Director and describe specific clinical changes or updates in the System. Medical Directives are distributed to all affected System stakeholders. Medical Directives are preferably distributed electronically but may be physically distributed to Agency contact persons. Each System Agency is responsible for disseminating Medical Directives to their stakeholders and credentialed EMS staff.

The goal of the Tactical Medic is to provide immediate medical care to injured or ill police officers or any civilians who require emergent or urgent medical attention during the course of the police mission.

The Tactical Medic is provided with specialized training and equipment to meet the unique needs of the tactical police environment. The Tactical Medic may offer prevention and wellness care to team members, provide initial emergent and urgent medical care to team members or emergent care to civilians, assist in coordinated handoffs with local EMS and hospital systems and provide any advice and safety issue concerns to the command staff per team protocols.

Objectives:

→ Provide on-scene care for injured police officers/team members, which may include temporizing management of non-serious injuries and illnesses to allow the officer to continue functioning during the operation.
→ Serve as medical liaison between Police and EMS/Fire/HAZMAT, during police missions
→ Provide communication and coordination with dispatch, assigned supervisor, or treating paramedic
→ Be assigned and then make available specialized medical equipment on scene
→ Educate team members on Self-Aid/Buddy-Aid
→ Educate team members on relevant TEMS principles so that they may effectively communicate with the Tactical Medic and assist as appropriate
→ Advise command staff concerning non-police safety issues such environmental concerns as relative to medical issues, medical issues with team members, and evacuation of injured parties

Medical Policies

Treatment Policy

Whenever a Tactical Medic is requested to provide medical evaluation and/or treatment, the patient will be assessed, any appropriate treatment provided as possible, and a patient care report (PCR) will be generated and stored, in compliance with HIPAA and other local policies

Patient Refusal

If a patient wishes to refuse treatment or transport, the paramedic will complete the pertinent parts of the PCR to document refusal of transport. Medical Control should be contacted for any high risk patient refusals.

Disclaimer:

Although this protocol has undergone close scrutiny, if questions arise, OLMC/OLPG or Medical Director should be contacted as possible. If this is not possible, one's best judgment should be followed and the issue be brought to the attention of OLMC/OLPG or Medical Director when possible. This document was designed pursuant to current industry Best Practices and should be utilized within the framework provided by on-scene police command elements.

Medical Records:

All patients treated by the Tactical Medic shall have a PCR completed in a timely manner. PCRs will be securely stored per Department protocols and in compliance with HIPAA. Special attention should be paid to vulnerable patients. Should the medic believe that a person, including a detained/arrested person or other vulnerable populations, requires evaluation, then the medic shall be allowed to evaluate and, as necessary, stabilize/treat the person/patient in question.

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 application of protocols and commission and omission of parts of the assessment, treatment, intervention and care of patients in this environment. Significant deviations from the protocol shall be document, along with their cause, in the PCR. The determination of the appropriateness of these deviations is at the discretion of the Medical Director, who will apply a reasonable and prudent provider standard to the case in light of the circumstances at hand during the Police Mission.

Table of Contents

TECC Situational Protocols

Direct Threat Care (DTC)

DTC: Goals & Principles

Goals:

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

Principles:

→ 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.).
→ Utilize threat mitigation techniques to minimize risk to casualties and providers, including techniques and tools for rapid casualty access and egress.
→ Defer triage to a later phase of care. Prioritize extraction based on resources available and the tactical situation.
→ Minimize trauma interventions.
→ Consider hemorrhage control
    → Consider tourniquet application.
    → Consider instructing casualty to apply direct pressure to the wound.
→ Consider quickly placing or directing casualty to be placed in position to protect airway

DTC: Guidelines

Guidelines:

- 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.).
- Direct the casualty to stay engaged in any tactical operation, if appropriate.
- Direct the casualty to move to a safer position and apply self-aid, if able.

Casualty Extraction & Monitoring

If a casualty can move to safety

- Instruct them to do so.

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.

If the casualty is responsive but cannot move

- Devise a tactically feasible rescue plan.
- Recognize that threats are dynamic and may be ongoing, requiring continuous threat assessments.

Hemorrhage Control

- Stop life threatening external hemorrhage, if tactically feasible:
    - Direct casualty to apply effective tourniquet, if able
    - Apply a tourniquet over clothing as proximal as possible.
        - Tighten until cessation of bleeding and move to safety
        - Consider moving to safety prior to application of the TQ if the situation warrants.
    - Consider instructing casualty to apply direct pressure to the wound

Airway Management

- Consider quickly placing casualty, or directing the casualty to be placed, in position to protect airway, if tactically feasible

Indirect Threat Care (ITC)

ITC: Goals & Principles

Goals:

→ Accomplish the mission with minimal casualties
→ Prevent any casualty from sustaining additional injuries
→ Keep response team maximally engaged in neutralizing the existing threat (e.g. active shooter, unstable building, confined space HAZMAT, etc.)
→ Minimize public harm
→ Stabilize the casualty as required to permit safe extraction to dedicated treatment sector or medical evacuation assets

Principles:

→ Maintain tactical supremacy and complete the overall mission.
→ 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).
→ Conduct dedicated patient assessment and initiate appropriate life-saving interventions as outlined in the Guidelines below.
    → DO NOT DELAY casualty extraction/evacuation for non life-saving interventions.
→ Consider establishing a casualty collection point (CCP) if multiple casualties are encountered
→ Unless in a fixed casualty collection point, limit triage the following categories:
    → Uninjured and/or capable of self-extraction
    → Deceased / expectant
    → All others
→ Establish communication with the tactical and/or command element and request or verify initiation of casualty extraction/evacuation.
→ Prepare casualties for extraction and document care rendered for continuity of care purposes.

ITC: Guidelines

Guidelines:

If threat neutralized or if Law Enforcement Casualty mental status is altered

- Make weapons safe

Hemorrhage Control

- Assess for unrecognized hemorrhage and control all sources of major bleeding.

If not already done

- Control life-threatening external hemorrhage with the following, based on anatomy amenable to treatment:
  - → Tourniquet
  - Apply tourniquet over clothing as proximal as possible
    If able to fully expose and evaluate the wound
    - Apply tourniquet directly to the skin 2-3 inches above wound
    - Do not apply over joint
  - → Pressure dressing with deep wound packing
    If traumatic total or partial amputation
    - Apply tourniquet regardless of bleeding
  - → Hemostatic Dressing
    If compressible hemorrhage not amenable to tourniquet use
    - Apply QuickClot gauze along with pressure bandage

If tourniquet applied during DTC

- Reassess tourniquets
- Consider exposing the injury and determining if an additional tourniquet is needed

- Expose and clearly mark all tourniquet sites with the time of tourniquet application

Airway Management:

If casualty unconscious without airway obstruction

- Perform Chin lift or jaw thrust maneuver
- Insert Nasopharyngeal airway
- Place casualty in the recovery position

If casualty with airway obstruction or impending airway obstruction

- Perform Chin lift or jaw thrust maneuver
- Insert Nasopharyngeal airway
- Instruct casualty to assume position that best protects the airway, including sitting up
- Place unconscious casualty in the recovery position

- Consider applying oxygen, if available

ITC: Guidelines

Breathing

If open and/or sucking chest wound

- Immediately apply an occlusive seal to cover the defect

- 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).

Circulation

- Assess for hemorrhagic shock.
  - → Altered mental status (in the absence of head injury) and weak/absent peripheral pulses are the best field indicators of shock.
  - → e.g. Systolic Blood Pressure (SBP)< 90mm Hg and Heart Rate > 100 bpm, or a shock index > 1 (HR/SBP).

If not in shock

- Administer PO fluids, if
  - → Conscious, can swallow, and has no injury requiring potential surgical intervention
  - → If confirmed long delay in evacuation to care

Ocular Trauma

If a penetrating eye injury is noted or suspected

- Protect the eye from external pressure
- Stabilize any impaled object to prevent movement during extraction

Secondary Assessment/Treatment

- Complete secondary survey checking for additional injuries
- Inspect and dress known wounds that were previously deferred.
- Consider splinting known/suspected fracture and check distal pulses, if able
- Apply pelvic binder for suspected pelvic fractures.

ITC: Guidelines

Burns

Assist airway, as appropriate

- Titrate O_2 to $SpO_2 \geq 94\%$ or work of breathing

If suspected carbon monoxide *(CO)*

- Ensure scene safety, and remove patient from toxic environment
- High flow O_2 by NRB + NC (15 lpm)

If potential for ongoing burning

- Brush dry chemicals then flush with water
  Initiate decontamination, as appropriate
- Remove clothing/jewelry (affected area and distal to burn)
- Flush eyes with copious amounts of water, as appropriate

- Apply dressings to burns
  → If < 10% BSA, use moist dressings
  → If > 10% BSA, use dry burn sheet or dry sterile dressing and insulate to prevent hypothermia

Casualty Extraction & Monitoring

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

- Prepare casualty for movement

Cardiac Arrest

- Begin 2-minute cycles of **b** with continuous chest compressions @ 100-120 bpm
- Open airway/passive oxygenation for first 6-minutes
- Apply AED; optimal pad placement in anterior-posterior (A-P) configuration
  If arrest witnessed by EMS/FIRE—apply AED immediately
  If arrest unwitnessed—perform 2-minutes of CPR before applying AED
- Airway Management only after > 6-minutes or 3-cycles of CPR
  Perform CPR to goal of $EtCO_2 \geq 20$ mmHg

Documentation of Care

- Ensure documentation of the following:
  → Clinical assessments
  → Treatments rendered
  → Changes in the casualty's status
- Forward this information with the casualty to responding 911 EMS providers

EVACUATION CARE (EVAC)

EVAC: Goals & Principles

Goals:

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

Principles:

→ Reassess the casualty or casualties.
→ Utilize START triage and consider priority and destination.
→ Utilize additional resources to maximize advanced care.
→ Avoid hypothermia.
→ Communication is critical, especially between tactical and non-tactical EMS teams.
→ Maintain situational awareness - In dynamic events, there are NO threat free area (e.g. green or cold zone)

EVAC: Guidelines

Guidelines:

- Reassess all interventions applied in previous phases of care. If multiple wounded, perform triage utilizing START triage.

Airway Management:

If casualty unconscious without airway obstruction

- Perform Chin lift or jaw thrust maneuver
- Insert Nasopharyngeal airway
- Place casualty in the recovery position

If casualty with airway obstruction or impending airway obstruction

- Perform Chin lift or jaw thrust maneuver
- Insert Nasopharyngeal airway
- Instruct casualty to assume position that best protects the airway, including sitting up
- Place unconscious casualty in the recovery position

- Consider applying oxygen, if available

Breathing

- Titrate O_2 to $SpO_2 \geq 94\%$ or work of breathing

If open and/or sucking chest wound

- Immediately apply an occlusive seal to cover the defect

- 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).

Hemorrhage Control

- Fully expose all wounds
- Assess for unrecognized hemorrhage and control all sources of major bleeding.

If not already done

- Control life-threatening external hemorrhage with the following, based on anatomy amenable to treatment:
  - → Tourniquet
    - Apply tourniquet directly to the skin 2-3 inches above wound
  - → Pressure dressing with deep wound packing
    - *If traumatic total or partial amputation*
      - Apply tourniquet regardless of bleeding
  - → Hemostatic Dressing
    - *If compressible hemorrhage not amenable to tourniquet use*
      - Apply QuickClot gauze along with pressure bandage

If tourniquet applied during DTC or ITC

- Reassess tourniquets
- Consider exposing the injury and determining if an additional tourniquet is needed

- Expose and clearly mark all tourniquet sites with the time of tourniquet application

EVAC: Guidelines

Circulation

- Reassess for hemorrhagic shock.
  - → Altered mental status (in the absence of head injury) and weak/absent peripheral pulses are the best field indicators of shock.
  - → e.g. Systolic Blood Pressure (SBP)< 90mm Hg and Heart Rate > 100 bpm, or a shock index > 1 (HR/SBP).

If not in shock

- Do not administer IV fluids
- Administer PO fluids, if
  - → Conscious, can swallow, and has no injury requiring potential surgical intervention
  - → If confirmed long delay in evacuation to care

Casualty Extraction & Monitoring

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

Secondary Assessment/Treatment

- Complete secondary survey checking for additional injuries
- Inspect and dress known wounds that were previously deferred.
- Splint known/suspected fractures and recheck pulses
- Apply pelvic binder for suspected pelvic fractures.

Ocular Trauma

If a penetrating eye injury is noted or suspected

- Protect the eye from external pressure
- Stabilize any impaled object to prevent movement during extraction

Burns

Assist airway, as appropriate

- Titrate O_2 to $SpO_2 \geq 94\%$ or work of breathing

If suspected carbon monoxide *(CO)*

- Ensure scene safety, and remove patient from toxic environment
- High flow O_2 by NRB + NC (15 lpm)

If potential for ongoing burning

- Brush dry chemicals then flush with water
  Initiate decontamination, as appropriate
- Remove clothing/jewelry (affected area and distal to burn)
- Flush eyes with copious amounts of water, as appropriate

- Apply dressings to burns
  - → If < 10% BSA, use moist dressings
  - → If > 10% BSA, use dry burn sheet or dry sterile dressing and insulate to prevent hypothermia

EVAC: Guidelines

Cardiac Arrest

- Begin 2-minute cycles of **b** with continuous chest compressions @ 100-120 bpm
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- Apply AED; optimal pad placement in anterior-posterior (A-P) configuration
  - If arrest witnessed by EMS/FIRE—apply AED immediately
  - If arrest unwitnessed—perform 2-minutes of CPR before applying AED
- Airway Management only after > 6-minutes or 3-cycles of CPR
  - Perform CPR to goal of $EtCO_2 \geq 20$ mmHg

Documentation of Care

- Ensure documentation of the following:
  - → Clinical assessments
  - → Treatments rendered
  - → Changes in the casualty's status
- Provide handover of care with above information to responding 911 EMS providers

TECC Guidelines

Airway Management

Direct Threat Care

- Consider quickly placing casualty, or directing the casualty to be placed, in position to protect airway, if tactically feasible

Indirect Threat Care

If casualty unconscious without airway obstruction

- Perform Chin lift or jaw thrust maneuver
- Insert Nasopharyngeal airway
- Place casualty in the recovery position

If casualty with airway obstruction or impending airway obstruction

- Perform Chin lift or jaw thrust maneuver
- Insert Nasopharyngeal airway
- Instruct casualty to assume position that best protects the airway, including sitting up
- Place unconscious casualty in the recovery position

- Consider applying oxygen, if available

Evac Care

As in Indirect Threat Care

Burns

Direct Threat Care
None

Indirect Threat Care
Assist airway, as appropriate
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If suspected carbon monoxide *(CO)*
- Ensure scene safety, and remove patient from toxic environment
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  → If > 10% BSA, use dry burn sheet or dry sterile dressing and insulate to prevent hypothermia

Evac Care
As in Indirect Threat Care

Breathing

Direct Threat Care
None

Indirect Threat Care
If open and/or sucking chest wound

- Immediately apply an occlusive seal to cover the defect

- 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).

Evac Care

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- 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).

Cardiac Arrest

Direct Threat Care

None

Indirect Threat Care

- Begin 2-minute cycles of **b** with continuous chest compressions @ 100-120 bpm
- Open airway/passive oxygenation for first 6-minutes
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  - If arrest witnessed by EMS/FIRE—apply AED immediately
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Evac Care

As in Indirect Threat Care

Casualty Extraction & Monitoring

Direct Threat Care

If a casualty can move to safety

- Instruct them to do so.

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.

If the casualty is responsive but cannot move

- Devise a tactically feasible rescue plan.
- Recognize that threats are dynamic and may be ongoing, requiring continuous threat assessments.

Indirect Threat Care

- Apply appropriate monitoring devices and/or diagnostic equipment if available
- Obtain and record vital signs.
- Prepare casualty for movement

Evac Care

As in Indirect Threat Care

Circulation

Direct Threat Care
None

Indirect Threat Care
- Assess for hemorrhagic shock.
  - → Altered mental status (in the absence of head injury) and weak/absent peripheral pulses are the best field indicators of shock.
  - → e.g. Systolic Blood Pressure (SBP)< 90mm Hg and Heart Rate > 100 bpm, or a shock index > 1 (HR/SBP).

If not in shock
- Do not administer IV fluids
- Administer PO fluids, if
  - → Conscious, can swallow, and has no injury requiring potential surgical intervention
  - → If confirmed long delay in evacuation to care

Evac Care
As in Indirect Threat Care

Documentation of Care

Direct Threat Care

None

Indirect Threat Care

- Ensure documentation of the following:
  - → Clinical assessments
  - → Treatments rendered
  - → Changes in the casualty's status
- Forward this information with the casualty to responding 911 EMS providers

Evac Care

As in Indirect Threat Care

Hemorrhage Control

Direct Threat Care

- Stop life threatening external hemorrhage, if tactically feasible:
  - Direct casualty to apply effective tourniquet, if able
  - Apply a tourniquet over clothing as proximal as possible.
    - Tighten until cessation of bleeding and move to safety
    - Consider moving to safety prior to application of the TQ if the situation warrants.
  - Consider instructing casualty to apply direct pressure to the wound

Indirect Threat Care

- Assess for unrecognized hemorrhage and control all sources of major bleeding.

If not already done

- Control life-threatening external hemorrhage with the following, based on anatomy amenable to treatment:
  - → Tourniquet
  - Apply tourniquet over clothing as proximal as possible
    If able to fully expose and evaluate the wound
    - Apply tourniquet directly to the skin 2-3 inches above wound
    - Do not apply over joint
  - → Pressure dressing with deep wound packing
    If traumatic total or partial amputation
    - Apply tourniquet regardless of bleeding
  - → Hemostatic Dressing
    If compressible hemorrhage not amenable to tourniquet use
    - Apply QuickClot gauze along with pressure bandage

If tourniquet applied during DTC

- Reassess tourniquets
- Consider exposing the injury and determining if an additional tourniquet is needed

- Expose and clearly mark all tourniquet sites with the time of tourniquet application

Evac Care

- Fully expose all wounds
- Assess for unrecognized hemorrhage and control all sources of major bleeding.

If not already done

- Control life-threatening external hemorrhage with the following, based on anatomy amenable to treatment:
  - → Tourniquet
  - Apply tourniquet directly to the skin 2-3 inches above wound
  - → Pressure dressing with deep wound packing
    If traumatic total or partial amputation
    - Apply tourniquet regardless of bleeding
  - → Hemostatic Dressing
    If compressible hemorrhage not amenable to tourniquet use
    - Apply QuickClot gauze along with pressure bandage

If tourniquet applied during DTC or ITC

- Reassess tourniquets
- Consider exposing the injury and determining if an additional tourniquet is needed

- Expose and clearly mark all tourniquet sites with the time of tourniquet application

Ocular Trauma

Direct Threat Care
None

Indirect Threat Care
If a penetrating eye injury is noted or suspected

- Protect the eye from external pressure
- Stabilize any impaled object to prevent movement during extraction

Evac Care
As in Indirect Threat Care

Secondary Assessment/Treatment

Direct Threat Care
None

Indirect Threat Care
- Complete secondary survey checking for additional injuries
- Inspect and dress known wounds that were previously deferred.
- Consider splinting known/suspected fracture and check distal pulses, if able
- Apply pelvic binder for suspected pelvic fractures.

Evac Care
As in Indirect Threat Care

Medical Protocols

Acute Pain Management

- Assist airway, as appropriate
- Titrate O_2 to $SpO_2 \geq 94\%$ or work of breathing
- Place in position of comfort and splint extremity injuries, as appropriate
- Utilize pain scale (see below)

If pain scale ≤ 6, consider

- Acetaminophen - 1 g PO (adult only)

Release at Scene (RAS)

A Release at Scene (RAS) may **only** be performed if the reason for the 911 call is trauma-related (non-medical), and if "**no**" is answered to all of the following questions:

→ Did the person activate 911 for EMS?
→ Is the person disoriented, confused, or otherwise impaired (e.g. alcohol or drugs, language barrier, MHMR)?
→ Was there any loss of consciousness?
→ Is there any complaint of illness, pain, or injury?
→ Was there a significant mechanism of injury (e.g. MCC, ejection, auto vs. pedestrian)?
→ Were any patients on-scene dead?
→ Does anyone object to the patient being released (e.g. family member, first-responder)?
→ Has the patient had contact with EMS in the last 72-hours?

The following information will be documented in the ePCR:

- The answers to the above questions
- Incident number, unit number, and crew
- Contact phone number and home address of the person
- Signature of the person
- Signature of a witness

Against Medical Advice (AMA)

Patients, patient's guardians, or patient's health care surrogates must demonstrate decisional capacity in order to make an informed refusal of consent for treatment and/or transport and, therefore, for a patient to be released Against Medical Advice.

All AMAs must be patient-initiated.

Assess the patient's decisional capacity as follows:

- Perform a thorough history & physical
- Develop a differential diagnosis specific to the patient presentation
- Offer appropriate treatment and transport to the patient
- Attempt to speak with whomever called 911, as well as any family, friends, bystanders, patient surrogates, or guardians and/or medical personnel on scene
- **Explain the risks and consequences of refusing treatment and/or transport at the patient's level of understanding, based on the differential diagnosis**
- **Assess the patient's understanding of the risks and consequences of refusing treatment and/or transport, and document this in the patient's own words**
- Document all of the above in the PCR

A patient's decisional capacity may be impaired as a result of, but not limited to, the following:

⇒ Use and/or abuse of alcohol, illegal or prescription drugs, or toxic substances
⇒ Head trauma, dementia, encephalopathy, and/or mental retardation
⇒ Acute or chronic psychiatric illness
⇒ Medical illness including, but not limited to, the following: hypoxia, hypotension, hyperglycemia, hypoglycemia, dehydration, and sepsis.

If patient lacks decisional capacity, and refuses treatment or transport:

- Ensure provider safety first and foremost
- Request Police & Fire to scene
- Contact Field Supervisor
- Contact OMD as needed

Allergic Reaction/Anaphylaxis

- Assist airway, as appropriate
- Titrate O_2 to $SpO_2 \geq 94\%$ or work of breathing
- Remove inciting agent (e.g. stinger), if possible

If Mild-Moderate Signs/Symptoms

→ Local reaction/rash/hives
→ Wheezing/bronchospasm
- Diphenhydramine 25mg PO

If Wheezing/Bronchospasm

- Albuterol - 2.5mg / Ipratropium - 0.5mg in 2ml NS nebulized IIRR x 2 (adult only)

If Severe Signs/Symptoms

→ Stridor
→ Oropharyngeal swelling/difficulty swallowing/throat tightening
→ Severe dyspnea
→ Wheezing with accessory muscle use
→ Poor air-movement to auscultation
→ Difficulty speaking in full sentences
→ Hypotension ± signs of shock
- Epinephrine 1:1,000 - 0.3mg IM, repeat × 2 q 5 min (max total dose 0.9 mg) - adult
- Epinephrine 1:1,000 - 0.01mg/kg IM (max dose 0.3mg), repeat × 2 q 5 min - pediatric

Diabetic Emergencies

- Assist airway, as appropriate
- Titrate O_2 to $SpO_2 \geq 94\%$ or work of breathing
- Assess blood glucose concentration

If blood glucose < 60 mg/dl and conscious/able to tolerate

- Glucose (oral) - 15g buccal - adult
- Glucose (oral) - 7.5g buccal - pediatric

Respiratory Distress

- Assist airway, as appropriate
- Titrate O_2 to $SpO_2 \geq 94\%$ or work of breathing
- Seat patient (semi-) upright for SBP > 100 and/or signs of adequate perfusion

If wheezing/bronchospasm

- Albuterol - 2.5mg / Ipratropium - 0.5mg in 2ml NS nebulized IIRR x 2 - adult only

Overdose

If suspected exposure to toxic agent
- Remove patient from environment if safe/trained/equipped (PPE) to do so
- Ensure full decontamination prior to initiating care
- Assist airway as appropriate
- Titrate O_2 to $SpO_2 \geq 94\%$ or work of breathing

If suspected opiate intoxication
- Naloxone - 2 mg IN (1 mg in each nostril), IIRR × 1 in 5 min - adult
- Naloxone - 0.1 mg/kg (max dose 0.4mg) IN (1 mg in each nostril), IIRR × 1 in 5 min - pediatric

Syncope/Fainting

- Titrate O_2 to $SpO_2 \geq 94\%$ or work of breathing
- Measure blood glucose, treat as appropriate
- Complete **Initial** Stroke Screen *see* Stroke/CVA/TIA
- Assess orthostatic pulse and blood pressure, as tolerated
- Consider the following conditions

  → Ischemic Chest Pain/Acute Coronary Syndrome/STEMI
  → Shock/Hypotension
  → Symptomatic Bradycardia
  → Tachycardias
  → Diabetic Emergencies
  → Seizure/Status Epilepticus
  → Stroke/CVA/TIA
  → Vasovagal (pain management)

Hyperthermia/Heat Stroke

- Assist airway, as appropriate
- Titrate O_2 to $SpO_2 \geq 94\%$ or work of breathing
- Remove patient from high temperature environment

*If **Mild** symptoms: heat cramps or heat exhaustion; no signs of altered mental status (AMS); temperature < 104°*

- Passive cooling (loosen clothing, fanning)

If available

- PO fluids (use caution if nausea/vomiting)

*If **Severe** symptoms: heat stroke (AMS, neurologic deficit, temperature > 104°F, sweating may or may not be present)*

- Begin active cooling
  - Use sheets/towels dipped in ice water directly on skin
  - Ice packs to neck, groin, and axillae

If shivering begins, mental status improves, or temperature < 102°F

- Cease active cooling measures

Mild	Moderate	Severe
Muscle cramps, sweating	Headache nausea/vomiting, malaise, dizziness, orthostatic hypotension, tachycardia	AMS , temperature >104° F, sweating may or may not be present

Spinal Motion Restriction

If any of the following findings are present

History (five questions), midline tenderness, pain or paresthesias on external rotation

- Initiate Spinal Motion Restriction Procedure

Spinal motion restriction may be deferred ONLY IF ALL OF THESE FINDINGS ARE ABSENT

History

→ Age ≥ 65

→ Limited ability to sense or communicate pain

AMS, LOC, intoxicated, head trauma, language barrier, mental retardation

→ Distracting injury

Long bone fracture, visceral trauma (abdomen, pelvis), large laceration, crush injury, large burn

→ Neurologic deficit

Motor/sensory loss or paresthesia

→ Dangerous mechanism of injury

Fall > 3-feet or 5-stairs

Axial loading injury to the head (diving accident/sports injury)

Vehicular accident

High speed motor vehicle accident > 60 mph

Motorized recreational vehicle accident

Ejection

Bicycle collision with immobile object (tree, parked car)

Struck by large vehicle

Roll-over

Palpation

→ Midline cervical tenderness

Active Range of Motion Test

→ Patient is able to actively rotate neck 45° both to left and right with no pain or paresthesias

If any pain or paresthesia upon rotation, IMMEDIATELY TERMINATE RANGE OF MOTION TEST

If patient unable to tolerate spinal motion restriction

- Attempt less restrictive means (c-collar only) or use position of comfort and/or allow patient to self-splint

Withholding Resuscitative Efforts

If any of the following clinical signs of irreversible death

→ Rigor mortis/dependent lividity
→ Fetal death after preterm delivery (< 20 weeks gestation by best determination)
→ Decapitation, decomposition **or** incineration

AND if all of the following

→ Pulseless/no heart tones
→ Apnea
→ No pupillary response

- Consider withholding resuscitative efforts
- Remain with the deceased until relieved by law enforcement (Unless unsafe to do so)
- Document objective findings including (each responding agency):
  - Position/location found
  - Any movement of the patient/surroundings
  - Access limitations
  - Assessment findings as appropriate
  - Suspicious/inconsistent scene or physical findings

For all other patients, or if at any point resuscitation was deemed appropriate, e.g. pulse/respiration witnessed by any provider

- Initiate resuscitative efforts, as per Cardiac Arrest Protocol

If patient has Out-of-Hospital Do Not Resuscitate order

→ See DNR Policy

If no clinical signs of irreversible death in the setting of blunt or penetrating trauma, and if all of the following:

→ Pulseless/no heart tones
→ Apnea
→ No pupillary response
→ Asystole on cardiac monitor

- Contact OLMC to consider withholding resuscitative efforts
- Remain with the deceased until relieved by law enforcement (unless unsafe to do so)
- Document objective findings including (each responding agency):
  - Position/location found
  - Any movement of the patient/surroundings
  - Access limitations
  - Assessment findings as appropriate
  - Suspicious/inconsistent scene or physical findings

If any patient has any clinical signs of irreversible death, and they are apneic and pulseless with no pupillary response, then resuscitation may be withheld

If there are no signs of irreversible death, then all patients (without DNR) must be worked, unless they have a trauma mechanism, in which case they must also have confirmed asystole, as well as be apneic and pulseless with no pupillary response, in order to withhold resuscitate efforts (requires OLMC approval).

Procedures

Assisted Ventilation/Bag Mask Ventilation

Indications:
→ Hypoxia uncorrected by passive high FiO_2
→ Ineffective minute ventilation
→ Respiratory insufficiency/failure

Contraindications:
Mask– inability to obtain a mask seal
→ Oral/Facial/mandibular disfigurement
→ Edentulousness with/without emaciation

Pearls & Pitfalls:
If mask ventilating
→ Ensure $EtCO_2$ waveform for every breath
Reposition patient head if no waveform
→ Do not utilize BURP/Sellick's maneuver to prevent gastric filling
→ Position ETSN with 2-hand mask seal to prevent gastric filling
If advanced airway
→ Ensure $EtCO_2$ waveform for every breath
→ After initial placement confirmation, avoid excessive ventilation rates/pressures
→ Be vigilant for tube migration/dislodgment the duration of placement and for all patient moves
→ Disconnect BVM for loading/unloading into the ambulance

Ventilation Rates:

Adult:
Cardiac Arrest:
- ≤ 12 Breaths per minute (every 5 seconds)

Perfusing:
- Titrate to SPO2 > 90 and eucapnia (as appropriate)

Pediatric:
Cardiac Arrest:
- 15 compressions 2 breaths (most arrests are asphyxia)

Perfusing:
- 12-20 Breaths per minute (every 3-5 seconds)

Procedure
- Position for patency
  Ear-to-sternal notch (ETSN)
  Up to 2 NPAs ± OPA (as appropriate)
- Obtain **strong** face-Mask seal
  (preferred 2 rescuer technique)
  Thenar grip or
  E-C "Clamp"
- Squeeze bag

(confirm 4 phase $EtCO_2$ waveform every breath)

Thenar Grip

EC "Clamp"

Contact Precautions

Indications:
→ Patient care required for known or suspected infection with any drug resistant organism

Contraindications:
None

Precautions:
→ Blood/secretions/wounds
→ Clostridium Difficile
→ E. Coli
→ MRSA

Procedure:
- Explain the reason for use of isolation equipment
- Wear gloves, gown, and eye protection
- Wash hands after leaving the care area
- Splash precautions (goggles/face shield) for suction, intubation, nebulizer updrafts etc.

BASIC
ASSIST
ADVANCED

Spinal Motion Restriction

AMBULATORY and Neurologically Intact • Already self-extricated • Already standing • No Thoracic or Lumbar spinal tenderness	1. Maintain cervical spine alignment until cervical collar can be placed 2. Allow patient to sit in position of comfort, while limiting motion

OR

ALL OTHERS	1. Maintain cervical spine alignment until cervical collar can be placed 2. Allow patient to lie supine as little movement as possible, *maintaining in-line stabilization*

Suction

Indications:

→ Trauma to the anterior head and/or neck

→ Oral and Nasal Secretions and vomitus unable to be cleared by the patient themselves associated with any condition

Pearls & Pitfalls:

→ Avoid prolonged suction intervals, oxygenate if possible between attempts at clearing the airway

→ Avoid contaminating catheters used for deep suctioning

Rinse catheter often

→ Apply suction on withdrawal only

→ Avoid inducing vomiting with oral suction, especially the partially alert patient

→ Utilize commercial bite block or Yankauer suction catheter between the molars when inserting hands in patient mouth

Nasal Suction (French catheter)

- Insert catheter (same technique as for nasal trumpet insertion)
  Stop insertion at depth of suspected location of blood/secretions/vomitus
- Apply suction
  Use vigorous spiral motion on removal
  (Slow removal when a pool of liquid is encountered till cleared)

Yankauer and Manual Suction Devices

Perfusing
(no CPR in progress):

- Drain patient mouth
  Roll patient to side (maintain in-line cervical stabilization as needed)
  Remove large or obvious foreign matter with gloved hand
- Sweep or Scoop bulk material if visible in mouth
- Suction mouth and pharynx on removal
  area past the base of the tongue
  Use vigorous spiral motion on removal

CPR in progress
(or unable to roll patient):

- Position head
  Ear-to-sternal-notch
- Open the patient's mouth
  Scissor technique (thumb and index finger)
- Pinch/remove large or obvious foreign matter with gloved hand
- Suction mouth and pharynx on removal
  area past the base of the tongue
  Use vigorous spiral motion on removal

Taser Removal

Indications:
Embedded taser probes

Contraindications:
Probes located in:
→ Face
→ Eye
→ Neck
→ Nipple/areola
→ Genitals or perineum
Any probe in the provider's judgment requiring excessive force to remove

Pearls & Pitfalls:

HPI: Number and duration of shocks if known

Risk communication with Law enforcement:
Taser patients can have any of the following and be at risk for in custody death:
→ Excited delirium
→ Arrhythmia/sudden cardiac arrest
→ Rhabdomyolyis/kidney injury-failure

Procedure:
- Ensure crew and patient safety
- Stretch skin surrounding the probe site till tight
- Pull probe out of the skin in the opposite direction that it penetrated (use firm grip ± gauze)
- Clean and bandage puncture wound
- Discard probe in sharp safe container