BRAZOS COUNTY FIRST RESPONDER MEDICAL PROTOCOL

SOUTH BRAZOS COUNTY ESD 1 FD, DISTRICT TWO VFD, PRECINCT THREE VFD, PRECINCT FOUR VFD

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Guidelines 1.01

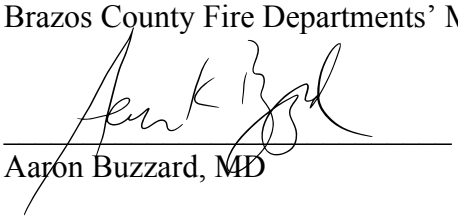
GENERAL RULES FOR FOLLOWING PROTOCOL

1. These protocols are designed to outline minimal patient treatment procedures. They have been developed to provide guidelines for initiating emergency patient care.

2. EMS personnel are defined as any member of a Brazos County Fire Department who holds an ECA/EMR or higher certification and is in good standing with the Texas Department of State Health Services.

3. The purpose of these protocols is to allow approved EMS personnel to perform patient care under **Standing Orders**. All treatments listed in this document are designated as Standing
Orders while being utilized according to the guidelines in the Geographical Area/Duty Status statement. Medical Control authorization is not required to perform any treatments listed in this protocol.

Brazos County Fire Departments' Medical Director:



Aaron Buzzard, MD

Geographical Area / Duty Status 1.02

Geographical Area:

While these protocols are intended to be used by providers while on duty in a Brazos County Fire Department's service area, providers credentialed under these protocols may render the care outlined in these protocols anywhere within the state of Texas, or while personnel credentialed in this system are actively deployed to emergency incidents outside of the state of Texas, subject to the Duty Status guideline listed below.

Duty Status:

Except as otherwise provided herein, Brazos County Fire Departments' EMS personnel may utilize these protocols for treatment anywhere within the state of Texas, or while actively deployed to emergency incidents outside of the state of Texas, provided that they are not under the influence of alcohol and/or other judgment-altering drugs or medications.

Protocol Deviation/Error 1.03

Protocol Deviation

If the attending EMS personnel deviate from protocol or are unable to perform care as outlined in the specific protocol, documentation should be done in the EMS report.

The documentation shall include:

1. Description of the deviation
2. Reason for the deviation and/or inability to perform the care
3. Outcome and effect on the patient

Errors

In the event an error in patient care occurs, written documentation should be immediately filed through the appropriate chain of command to the individual Fire Department's EMS coordinator.

The documentation shall include:

1. Incident number
2. Patient's name
3. Personnel involved
4. Description of the error
5. Reason for the error
6. The outcome and effects on the patient

The documentation will then be forwarded to the Medical Director.

Consent for Treatment 1.04

Legal consent for treatment and/or transportation must be obtained by EMS personnel:

1. For the purpose of this protocol, consent may be obtained from an adult patient who is at least 18 years of age, and is alert/oriented to person, place, time, and event.

2. All adult patients who are in possession of their mental faculties (conscious, alert and oriented to person, place, date, and event) must give EMS personnel permission for treatment and transportation (verbal consent is sufficient). Adult patients who are unconscious may be treated under implied consent.

3. Minor patients are unable to give consent except as outlined in Section 6, below. Every effort should be made to obtain legal consent for the treatment of minors from a parent or legal guardian.
   a. Minor patients may be treated under implied consent in circumstances which present serious medical conditions, life threats, or have the potential for permanent disability. b. In situations which involve minors not having a life-threatening injury, every reasonable effort to contact the minor's parent or legal guardian should be made to receive consent to treat.

4. If a parent cannot be contacted within a reasonable amount of time, the following individuals may give consent, in this order:
   a. An adult temporary guardian who is present with the child (i.e. babysitter)
   b. A grandparent
   c. An adult brother or sister
   d. An adult aunt or uncle

5. The parent or guardian may leave written authorization for consent to treat with an educational institution or day care center in which the minor is enrolled. The parent or guardian may also leave written authorization for consent to treatment with an individual.
   a. In accordance with The Texas Family Code section 32.003. The minor may consent to their own treatment under the following circumstances:
      i. The minor is on active duty with the Armed Services of the USA

Consent for Treatment 1.04

ii. Is unmarried and pregnant and consents to hospital, medical or surgical treatment related to the pregnancy

iii. If the consent to examination and treatment is for drug addiction, dependency or other condition directly related to drug use

iv. Consent is to the diagnosis and treatment of an infectious, contagious or communicable disease, which is required by law or regulation to be reported by the licensed physician to a local health officer

v. Is unmarried, is the parent of a child, and has actual custody of his or her child and consents to medical, dental, psychological, or surgical treatment for the child.

Patient Refusal 1.05

Any adult patient who may give consent for treatment under Protocol 1.04: (Consent for Treatment) and who is in possession of his/her mental faculties (conscious, alert and oriented to person, place, time, and event) may refuse treatment and/or transport for him/herself or his/her minor child.

If a patient desires to refuse treatment/transport against medical advice (except as specified below), first responders should document and complete a “Patient Refusal - Against Medical Advice” per department standards.

First responders assessing/treating patients with a chief complaint/primary impression other than chest pain, difficulty breathing, abdominal/back pain, shock/hypoperfusion, or dizziness, may disregard an ambulance and complete a patient refusal of treatment/transport per BCFA and/or agency SOP/SOG.

Patients with a chief complaint/primary impression listed above require transfer to the crew of an ALS staffed and equipped ambulance for ALS assessment.

Helicopter Activation 1.06

First responders may consider helicopter activation for patients when the patient is located in an area which is inaccessible by ground ambulance, or when air transport will significantly reduce the time it takes to deliver the patient to appropriate care. A helicopter may be placed on standby by any responding unit prior to arriving on scene but may only be cancelled by someone **on scene** who holds the highest level of certification that will be responding to the incident.

Helicopter activation should be considered for the following patients when ground transport time is expected to exceed 30 minutes:

Any patient located in an area which is not reasonably accessible by ground ambulance Patients with significant injuries with extrication time exceeding 20 minutes
GCS <10
Blunt force or penetrating trauma to the abdomen, pelvis, chest, neck or head
Blunt force abdominal trauma to a pregnant patient presenting with evidence of internal injury
Partial or total amputation of an extremity (excluding single digits)
Significant crushing injuries
Burns which are 2nd or 3rd degree in nature in which:
- BSA is >9% or to the hands, feet, face, or perineum
- Significant electrical, inhalation, or chemical burns are present

Submersion injury (drowning/near drowning) patients
Ejection from a moving vehicle in which the patient presents with significant injuries
Extrication time > 20 minutes from a vehicle or machinery
Fall from a height of greater than three times the patient's height
Any scalping or de-gloving injury
Spinal cord/spinal column injury resulting in paralysis
Any other situation in which the credentialed provider deems necessary

Treatment/No Transport 1.07

In some cases, it is acceptable for first responders to administer treatment when the patient will not be transported.

In these cases, the first responders should:

1. Perform care as outlined by protocol
2. Complete a patient care report, documenting the treatments performed
3. Have the patient sign the “Patient Refusal of Transport” section of the BCFD patient care report
4. Explain the necessity of and options for seeking further medical help

No Patient Incidents 1.08

Purpose:
To give EMS personnel the criteria needed to decide if a patient was present and a patient report must be completed.

Criteria for no patient incident:

- Does the person request treatment or transport? YES/NO
- Was a mechanism of injury present? YES/NO
- Was an illness present? YES/NO
- Were alcohol or drugs involved? YES/NO
- Is it a possible suicide attempt? YES/NO
- Is it a possible abuse situation? YES/NO

If all criteria are NO, complete supplemental report only

If on criteria is YES, complete Patient Incident report

Examples of No Patient calls (with no person at the scene who meets the above criteria): 1. EMS Standby.

2. Fire Standby.
3. PD Standby.
4. Public assist.
5. Patient Gone on Arrival of EMS.

Do-Not-Resuscitate Orders (DNR) 1.09

Examples of No Patient calls (with no person at the scene who meets the above criteria): 1. EMS Standby.

2. Fire Standby.
3. PD Standby.
4. Public assist.
5. Patient Gone on Arrival of EMS.

Brazos County first responders will honor the following orders:

1. Department of State Health Services Out of Hospital Do-Not-Resuscitate Orders 2. Facility Do-Not-Resuscitate Orders
3. Physician Do-Not-Resuscitate Orders
4. Directives to Physicians (Durable Power of Attorney for Health Care and Living Wills)
5. Family and/or Medical power of attorney states that DNR is valid but not present, and do not wish resuscitation

I. The following care will be initiated if a patient presents with a valid Order (including TDH OOH-DNR bracelet and/or necklace):

A. Honor DNR Order: DO NOT ATTEMPT RESUSCITATION if:

1. Patient presents with no pulse
2. Patient presents with a pulse without respirations (excluding airway obstruction)B.

Do not honor DNR Orders if:

1. Suspicion of suicide, homicide or non-natural cause of death
2. Patient is in custody of a law enforcement agency
3. Patient is pregnant
4. Patient's family and/or medical power of attorney indicate to not start or to stop resuscitation efforts.

C. Provide only palliative care if the patient presents with a pulse and spontaneous respirations.

1. Palliative care: Administer oxygen as necessary.

Do-Not-Resuscitate Orders (DNR) 1.09

II. If there is a dispute on scene or the order is NOT present (includes DSHS OOH-DNR bracelet and/or necklace).

A. Inform the family and/or bystanders that without the order present, life saving measures must and will be rendered, unless power of attorney is present and indicates discontinuation of resuscitation.

B. Begin resuscitation

C. Upon arrival of the responding transporting agency, EMS personnel shall transfer care to the lead crewmember for referral to that agency's protocols to determine whether resuscitative measure shall be continued

III. In the event the patient becomes pulseless or apneic during assessment, providers shall:

A. Honor the DNR unless conditions indicated by Section I-B above are present, or

B. Refer to DOS protocol

IV. Documentation

A. Document presence and type of order; if possible, attach a copy to the patient report B. If transporting a patient with a DNR order, attempt to keep the order with the patient

Figure: 25 TAC §137.25 (b)(2)

STOP DO NOT RESUSCITATE

TEXAS DEPARTMENT OF STATE HEALTH SERVICES
STANDARD OUT-OF-HOSPITAL DO-NOT-RESUSCITATE ORDER

This document becomes effective immediately on the date of execution. It remains in effect until the patient is pronounced dead by authorized medical or legal authority or the document is revoked. Comfort measures will be given as needed.

All persons who sign the form must sign again under number 3.

1. _____ **Date of Birth:** _____ **Male/Female** (Circle One)

Patient's full legal name — printed or typed

2. COMPLETE **ONE** OF THE FOUR BOXES: **A**, **B**, **C**, or **D**. If using Box **A**, **B**, or **C**, Witnesses and Physician's Statement must be completed.

A. **Patient's Statement:** I, the undersigned, am an adult capable of making an informed decision regarding the withholding or withdrawing of CPR, including the treatments listed below, and I direct that none of the following resuscitation measures be initiated or continued: **Cardiopulmonary Resuscitation (CPR), Transcutaneous Cardiac Pacing, Defibrillation, Advanced Airway Management, Artificial Ventilation.**

Signature _____ Date _____ Printed or Typed Name _____

B. **Only use this box if the order is being completed by a person acting on behalf of an adult patient who is incompetent or otherwise unable to make his or her wishes known.**

I am the patient's: ☐ legal guardian; ☐ agent under Medical Power of Attorney; ☐ or Qualified Relative (see back); **AND**:

☐ I attest to issuance of an Out-of-Hospital DNR by the patient by nonwritten means of communication; **OR**
☐ I am acting under the guidance of a prior Directive to Physicians; **OR**
☐ I am acting upon the known values and desires of the patient; **OR**
☐ I am acting in the patient's best interest based upon the guidance given by the patient's physician.

I direct that none of the following resuscitation measures be initiated or continued on behalf of the patient: Cardiopulmonary Resuscitation (CPR), Transcutaneous Cardiac Pacing, Defibrillation, Advanced Airway Management, Artificial Ventilation.

Signature _____ Date _____ Printed or Typed Name _____

C. **Only use this box if the order is being completed by a person acting on behalf of a minor patient who has been diagnosed with a terminal or irreversible condition.**

I am the minor patient's: ☐ Parent; ☐ legal guardian; or ☐ managing conservator.

I direct that none of the following resuscitation measures be initiated or continued on behalf of the patient: Cardiopulmonary Resuscitation (CPR), Transcutaneous Cardiac Pacing, Defibrillation, Advanced Airway Management, Artificial Ventilation.

Signature _____ Date _____ Printed or Typed Name _____

WITNESSES: (see qualifications on reverse) We have witnessed all of the above signatures.

Witness 1 Signature _____ Date _____ Witness Printed or Typed Name _____

Witness 2 Signature _____ Date _____ Witness Printed or Typed Name _____

PHYSICIAN'S STATEMENT: I, the undersigned, am the attending physician of the patient named above. I have noted the existence of this order in the patient's medical records, and I direct out-of-hospital health care professionals to comply with this order as presented.

Date _____ Physician's signature _____ Printed name _____ License number _____

D. **Only use this box if the order is being completed by two physicians acting on behalf of an adult who is incompetent or otherwise unable to make his or her wishes known, and who is without a legal guardian, agent, or qualified relative.**

☐ I attest to issuance of an Out-of Hospital DNR by the patient by nonwritten communication; **OR**:
☐ The patient's specific wishes are unknown, but resuscitation measures are, in reasonable medical judgement, considered ineffective in these circumstances or are otherwise not in the best interest of the patient.

I direct that none of the following resuscitation measures be initiated or continued on behalf of the patient: Cardiopulmonary Resuscitation (CPR), Transcutaneous Cardiac Pacing, Defibrillation, Advanced Airway Management, Artificial Ventilation.

Signature _____ Treating Physician _____ Date _____ Printed or Typed Name _____

Signature Second Physician who is not involved in treating the patient _____ Date _____ Printed or Typed Name _____

3. **ALL PERSONS WHO SIGNED MUST SIGN HERE (Pursuant to H&SC 166.083(b)(13). This document has been properly completed.**

Signature of Patient, Agent or Relative (A, B, or C) _____ Signature of Second Physician (D) _____ Signature of Attending Physician _____

Signature of Witness _____ Signature of Witness _____ Date _____

SHOULD TRANSPORT OCCUR, THIS DOCUMENT OR A COPY MUST ACCOMPANY THE PATIENT.

OUT-OF-HOSPITAL DNR INSTRUCTIONS

PURPOSE:
This form was designed to comply with the requirements as set forth in Chapter 166 of the Health and Safety Code (H&SC) relating to the issuance of Out-of-Hospital Do-Not-Resuscitate (DNR) orders for the purpose of instructing Emergency Medical Personnel and other health care professionals to forgo resuscitation attempts and to permit the patient to have a natural death with peace and dignity. This order does NOT affect the provision of other emergency care including comfort care.

APPLICABILITY:
This form applies to all health care professionals operating in any out-of-hospital setting to include hospital outpatient or emergency departments and physician's offices.

IMPLEMENTATION:
A competent adult may execute or issue an Out-of-Hospital DNR Order. The patient's attending physician will document the existence of the directive in the patient's permanent medical record.

If an adult patient is capable of providing informed consent for the order, he/she will sign and date the out-of-hospital DNR order on the front of this sheet in Box A. In the event that an adult patient is unable to provide informed consent, his/her Legal Guardian, agent under Medical Power of Attorney, or Qualified Relative may execute the order by signing and dating the form in Box B. If an adult patient is unable to provide informed consent and none of the persons listed in Box B are available, the treating physician may execute the order using Box D with the consent of a second physician who is not treating the patient and/or is a member of the health care facility ethics committee or other medical committee.

The following persons may execute an out-of-hospital DNR order on behalf of a minor: the minor's parents, the minor's legal guardian or the minor's managing conservator. A person executing a DNR order on behalf of a minor may execute the order by signing and dating the form in Box C. **An out-of-hospital DNR order may not be executed unless the minor has been diagnosed by a physician as suffering from a terminal or irreversible condition.**

The form must be signed and dated by two witnesses except when executed by two physicians only (Box D).

The original standard Texas Out-of-Hospital DNR form must be completed and properly executed. Duplicates may be made by the patient, health care provider organization or attending physician as necessary. **Copies of this completed document may be used for any purpose that the original may be used and shall be honored by responding health care professionals.**

The presence of a Texas DNR identification device on a person is sufficient evidence that the individual has a valid Out-of-Hospital DNR Order. Therefore, either the original standard form, a copy of the completed standard form, or the device is sufficient evidence of the existence of the order.

For information on ordering identification devices or additional forms, contact the Texas Department of State Health Services at (512) 834-6700.

REVOCATION:
The Out-of-Hospital Do-Not-Resuscitate Order may be revoked at ANY time by the patient **OR** the patient's Legal Guardian/Agent/Managing Conservator/Qualified Relative, Parent (if a minor), or physician who executed the order. The revocation may involve the communication of wishes to responding health care professionals, destruction of the form, or removal of all or any Do-Not-Resuscitate identification devices the patient may possess.

AUTOMATIC REVOCATION: This Out-of-Hospital DNR order is automatically revoked if the patient is known to be pregnant or in the case of unnatural or suspicious circumstances.

DEFINITIONS:
Attending Physician: The physician who is selected by or assigned to a patient who has primary responsibility for a person's treatment and care and is licensed by the Texas State Board of Medical Examiners or who is properly credentialed and holds a commission in the uniformed services of the United States and who is serving on active duty in this state. **(H&SC 166.002 (3) & (12))**

Qualified Relatives: Those persons authorized to execute or issue an out-of-hospital DNR order on behalf of a person who is comatose, incompetent, or otherwise mentally or physically incapable of communication under Section 166.088 H&SC Section 166.088 refers to 166.039, "One person, if available, from one of the following categories, in the following priority...: (1) The patient's spouse; (2) the patient's reasonably available adult children; (3) the patient's parents; or (4) the patient's nearest living relative."

Health Care Professional: Means physicians, nurses, physician assistants and emergency medical services personnel, and, unless the context requires otherwise, includes hospital emergency department personnel. (H&SC 166.081 (5))

Witnesses: Two competent adult witnesses must sign the form acknowledging the signature of the patient or the person(s) acting on the patient's behalf (except when signed by two physicians in Section C). Witness One must meet the qualifications listed below. Witness Two may be any competent adult. Witness One (the "qualified" witness) may not be: (1) person designated to make a treatment decision for the patient; (2) related to the patient by blood or marriage; (3) entitled to any part of the estate; (4) be a person who has a claim against the estate of the patient; (5) the attending physician or an employee of the attending physician; (6) an employee of a health care facility in which the patient is being cared for, if he or she is involved in providing direct patient care to the patient; or (7) an officer, director, partner, or business office employee of a health care facility in which the patient is being cared for or any parent organization of the health care facility.

Please report any problems with this form to the Texas Department of State Health Services at (512) 834-6700.

Revised July 19, 2005
Texas Department of State Health Services

Death on Scene (DOS) 1.10

In the case of a clinically dead patient, it is the responsibility of the on scene EMS personnel to determine whether or not resuscitative efforts should be started. That determination should be based on the extent of the injury and the length of down time.

1. Definition of clinical death (DOS).
    a. Visible head or chest trauma clearly incompatible with life
    b. Decapitation
    c. Rigor mortis
    d. Dependent lividity
    e. Decomposition
    g. Absence of breathing and pulse in a mass casualty incident
2. Body should not be disturbed or moved without authorization by appropriate agency 3.

Contact dispatch and request law enforcement and Justice of the Peace as soon as possible

4. The EMS personnel are required to document the absence of vital signs and any evidence of death
5. If possible, document patient history
6. Limit the number of personnel in the area until the scene is released to law enforcement
7. At least one medical person should remain on the scene to relay pertinent information to law enforcement and Justice of the Peace

Suspected Abuse 1.11

When treating any patient suffering from injuries and/or illnesses suspected as abuse, EMS personnel shall:

1. As with all patients, conduct the patient assessment and continue with patient care.
2. Be sure to use extreme tact and professionalism when dealing with this situation. DO NOT let your emotions enter the situation when dealing with the relatives or acquaintances of the individual.
3. Notify law enforcement as soon as possible.
4. Be alert to any evidence that might be found. Be cautious and do not destroy any evidence.
5. Upon arrival of ambulance, inform EMS personnel of your concerns and findings of the situation. Use a confidential environment to relay this information.
6. At the completion of the call, fully document all aspects of the incident, including the relaying of your concerns to the ambulance crew and the notification of law enforcement.
7. All personnel witnessing signs of suspected abuse shall document objective facts of the circumstances for reporting to the appropriate agency as soon as possible following the incident.

   The Fire Chief or EMS Coordinator of the agency which responded to the incident shall be notified to coordinate the reporting of the facts to the proper agency for investigation.

Abandoned Children 1.12

Under Texas law, fire stations are designated drop off sites for abandoned children. By law, this is a totally anonymous process, and no questions may be asked of the person who is dropping off the child.

Procedures:

1. Assess and treat the child in accordance with protocols.
2. Notify law enforcement and call for an ambulance for transport to a medical facility.

Self-Protection 1.13

Guidelines for EMS personnel to protect themselves from physical danger by a violent person with or without a weapon:

1. In all cases, where the threat of physical harm is probable (i.e., domestic violence, hostage situations, psychiatric patients, and any situation where there may be weapons on the scene), EMS personnel should request law enforcement assistance before arrival on scene. Medical personnel should not enter the area until law enforcement reports that the scene is secure. At no time should EMS personnel attempt to manage the situation without aid. Primary emphasis in such situations should be the safety of the crew.
2. If EMS personnel are threatened with bodily harm, they should make every effort to avoid confrontation and leave the area immediately. Law enforcement assistance should be requested as soon as possible.
3. In situations where personal injury seems imminent, personnel may use any measure reasonable and prudent to protect themselves from injury or death. Law enforcement assistance should be requested as soon as possible.

Concealed Weapons 1.14

Concealed Weapons on Patients

If a patient is found to be carrying a concealed weapon and the patient is to be transported, the following procedure will be followed:

1. Notify law enforcement and turn the weapon over to a law enforcement officer to secure the weapon.
2. If law enforcement is not available in a reasonable time before the ambulance transports, first responders may:
   a. Secure the weapon in an outside compartment on an apparatus, have law enforcement meet the apparatus at the scene, and turn the weapon over to a law enforcement officer.
   b. Turn the weapon over to the transporting ambulance crew for securing per that agency's policy.

Non-Credentialed Personnel 1.15

Personnel who are not credentialed under these protocols may be used for assistance with the following guidelines:

1. Volunteer fire department personnel who are not EMS certified may respond to assist the ambulance crew as manpower for performing CPR, lifting patients, moving patients and assisting with supplies. Whenever possible, non-certified personnel shall not be the first to arrive on a scene.

2. Individuals who are personally known by credentialed providers to be medically certified and employed by a Brazos Valley RAC member agency may be used to assist with BLS treatments outlined in this protocol at the discretion and under the direction of credentialed providers operating under this protocol.

3. Any individual on scene identifying him/herself as medically trained who is not personally known to the provider to be medically certified may be utilized to assist with limited patient care as reasonably necessary given scene conditions at the discretion and under the direction of credentialed providers operating under this protocol.

Patient Reports 1.16

I. Patient reports

A patient report will be completed by the first responder when patient contact is initiated by the first responder prior to the arrival of an ambulance, or a refusal is obtained by the first responder. If the ambulance arrives on scene before or at the same time as the first responder and the patient is to be transported, the patient is in the care of the ambulance crew, and first responders are not required to complete a patient care report. The first responder shall still complete a NFIRS report per the individual department's policy.

II. Confidentiality

All patient reports are considered confidential. All information pertaining to the identification of a patient will not be discussed outside of the realm of patient care, QI/QA and billing. Under no circumstance is patient information to be released outside of the circumstances listed above unless the patient (or parent/guardian of a minor) has expressed their desire to release information in writing or upon subpoena.

III. Verbal reports to transporting crew

The ambulance will be notified by radio or phone that a patient is being prepared for transport. The verbal report will include all relevant and pertinent information including nature of illness/injury, vital signs, patient history, and care rendered.

Upon arrival of the ambulance, a verbal report will also be given to the attending paramedic to whom patient care will be transferred. The verbal report will include all relevant and pertinent information including nature of illness/injury, vital signs, patient history, and care rendered.

IV. Written reports to transporting crew

The patient data sheet will be completed as soon as possible after patient contact. A copy of the patient data sheet shall be provided to the responding ambulance crew when the transfer of care is completed. A written report will be forwarded to the transporting agency upon request as outlined in the First Responder Agreement.

Inventory List 1.17

The list represents the minimum equipment and supplies to be carried by EMS personnel when responding to calls as a first responder. Additional use of supplies must be approved by the medical director if not included in individual protocols.

Item	Quantity
1” Tape	1
4” Roller bandage	3
4x4's	10
Band-aids	5
BP Cuff Adult	1
Sterile, Dry, Burn Sheet	1
BVM – Adult/or pocket mask w one-way valve	1
Pocket Mask	1
Antiseptic, Waterless Cleaner	1
EMT Shears	1
Gloves (to fit the first responder)	10 pair
Multi-trauma pad	1
Airway Adjunct: OPA or NPA Set (Size 0 – 6)	1
Oval Eye Pads	3
Pen Light	1

Protective Gowns	1
Protocol Book	1
Rescue/Foil Blankets	1
Small Bio-Hazard trash bags	2
Stethoscopes	1
Surgipads	2
Tourniquet	1
Triangular Bandages	3
Oxygen	1
Pedi non re-breather mask	1
Adult Nasal Cannula	1
Adult Non re-breather Mask	1
Sterile Water	1

Advanced Life Support 1.18

All provider certification levels are able to perform each protocol or procedure unless otherwise stated in the specific protocol or procedure.

The following skills/medications are limited to personnel holding Texas DSHS Advanced EMT (AEMT) or higher under these protocols:

- Endotracheal intubation
- Peripheral IV access
- IV/IM Naloxone (Narcan®) administration
- IV/IM Diphenhydramine (Benadryl®) administration
- Dextrose

The following medications are limited to personnel holding Texas DSHS Paramedic certification/licensure under these protocols:

- Epinephrine 1:10,000

Upon arrival of the ambulance which will transport the patient, the transporting agency's protocols supersede these standing orders. First responders credentialed at the ALS level are permitted to perform ALS skills/administer ALS medications at the discretion/direction of the in-charge paramedic who will be transporting the patient, and under that agency's protocols.

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SOUTH BRAZOS COUNTY ESD 1 FD, DISTRICT TWO VFD, PRECINCT THREE VFD, PRECINCT FOUR VFD

Revision History 1.19

April 2008: C. Blount
January 2019: D. Dibello
June 2023: C. Blount
June 2024: B. Zollinger

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AED Use 2.01

An Automated External Defibrillator (AED) delivers a predetermined energy setting with a pre-determined biphasic shock. To ensure that the electrical therapy (shock) delivered by the AED is optimized, it is important to ensure that a minimum of 2 minutes (3 cycles of compressions/respirations) have been provided prior to defibrillating the patient. Can be completed by all skill levels.

Indications:

Pulseless, apneic patient >8 years of age or 55 lbs. (25kg) when utilizing the adult pads
Pulseless, apneic patient <8 years of age or <55lbs. (25kg) when utilizing the child/infant pads

Contraindications for shock:

Consciousness
Effective breathing
Presence of a pulse

Precautions:

The preferred placement of pediatric pads is the anterior-posterior placement (front and back) for children/Infants with small torsos. (Anterior electrode to the left of the sternum centered as close as possible to the point of maximum cardiac impulse, place the posterior electrode to the left of the spinal column directly behind the anterior electrode.

The adult placement is anterior-anterior, (right anterior chest and the other on the left lower chest wall, as shown on the package and the pads which are placed on the patient.

Procedure:

1) Confirm airway, breathing and lack of circulation.
2) Attach pads appropriate for the patient (adult or pediatric)
3) Turn on AED by pressing the "ON" button.
4) Provide compressions for two minutes if EMS providers did not witness arrest. If witnessed arrest, proceed to next step WHILE performing compressions.
5) Connect therapy pads and allow the AED to analyze. Do not touch patient during analyze mode. 6) If a shock is indicated by the AED, verbalize "CLEAR" and ensure no one is touching the patient. 7) Press the "SHOCK" button to deliver a shock if indicated.
8) Continue to follow prompts as provided by the AED.

Blind-Insertion Airway Device 2.02

A Blind-Insertion Airway Device (BIAD) may be used by all providers certified EMT or higher to secure the airway in patients without a gag reflex. It is acceptable under this protocol for providers to use any FDA-approved BIAD.

Indications:

Patients without a gag reflex

Contraindications:

Patients presents with a gag reflex
Patients who are physically smaller than the manufacturer's recommendations for the selected device

Procedure:

1. Select the appropriate size airway device for the patient's size.
2. Pre-oxygenate the patient with the BVM/airway adjunct for a minimum of 90 seconds prior to insertion of the device. Pre-oxygenation may take place during the preparation and testing of the device.
3. While holding the device with the dominant hand, hold the mouth open and apply chin lift with the other hand.
4. Insert the device per the manufacturer's recommendations.
5. If applicable, use the syringe(s) provided, inflate the cuff(s) with the manufacturer-approved volume.
6. Attach the BVM to the device and check for placement with ventilation per the manufacturer's recommendations.
7. Confirm proper position by auscultation, chest movement and proper $ETCO_2$ waveform.
8. Secure device to patient using tape or a commercial securing device.
9. Continue to ventilate the patient as appropriate per protocol.

Each individual department's EMS Coordinator will be responsible for ensuring proficiency for his/her personnel on the device(s) utilized by a given department.

Cardiopulmonary Resuscitation (CPR) 2.03

The most important aspect of CPR under the current guidelines is good chest compressions. Everyone hurries to secure the airway, but current research shows that ***continuous, uninterrupted chest compressions*** are the key to giving your patient the best chance of survival. Securing an airway should be a second priority, if it can be done without interrupting chest compressions in the initial minutes; otherwise continue chest compressions until an AED/defibrillator arrives and can be attached.

Good CPR, including adequate depth, rate, and chest recoil is critical to the survival of cardiac arrest. It is important that the patient be on a hard surface, such as the ground or a backboard for compressions to be the most effective. CPR should be performed for a minimum of 2 minutes before performing any other therapy following any interruption of chest compression lasting more than 5 seconds.

Medication Administration 2.04

Providers credentialed under these protocols may administer medications as listed below under these protocols in accordance with their department's policies/procedures. In all cases, providers must ensure contraindications for a specific medication to be administered are not present and that medications are not expired, or that:

1) An authorization from the Medical Director to use expired provider-carried medications is in place, or:

2) The provider has explained that expired patient-supplied medications:
Are expired, and;
May or may not have the desired effects, and;
May or may not have undesired side effects

3) If patient-supplied medications are administered, the provider must document on the patient care report that the above items were explained to the patient and that patient understands and consents to administration of their own expired medications by the provider.

Approved medications for first responder administration:

EMR/EMT
- Albuterol (Levalbuterol®)
- Aspirin
- Duoneb (Albuterol/Ipratropium Bromide premix)
- Epinephrine 1:1,000 (including Epi-Pen® or Epi-Pen Jr.®)
- Glucose
- Naloxone (Narcan®) IN, supplied in prepackaged, over the counter devices
- Nitroglycerine

AEMT (including EMR/EMT level)
- Naloxone (Narcan®) IV/IM
- Diphenhydramine (Benadryl®) IV/IM
- Normal saline (Sodium Chloride 0.9%)
- Dextrose

EMT-Paramedic (including EMR/EMT/AEMT)
- Epinephrine 1:10,000

Albuterol (Levalbuterol®)

Mechanism:

Albuterol is a short-acting non-selective Beta-agonist which works by opening the lower airway passages to increase air flow

Indications:

Respiratory distress

Contraindications:

Allergy to medication

Suspected cardiac ischemia

Dosing information:

A single dose is 2-3 puffs from a metered-dose inhaler or (1) "bullet" dose of 2.5 mg

Procedure for administration:

Metered-dose inhaler:

Ensure patient's lips form a tight seal around the mouthpiece of the inhaler
Instruct the patient to exhale completely
Instruct the patient to inhale deeply as you depress the medication vial down to activate the sprayer
Instruct the patient to hold the breath as long as possible before exhaling
Repeat as needed 1-2 more times

Small-volume nebulizer:

Open package containing medication and place full amount (2.5mL) into small-volume nebulizer
Assemble nebulizer and connect oxygen tubing
Turn on oxygen at 6 LPM to begin nebulizing medication
Instruct patient to hold mouthpiece in his/her mouth OR place mask on patient
Instruct patient in breathe in deeply to inhale medication

Aspirin

Mechanism:

Aspirin works by reducing the ability of platelets to form clots

Indications:

Chest pain
Suspected cardiac ischemia

Contraindications:

Allergy to medication/hypersensitivity to salicylates
Previous reactions
Known or suspected active hemorrhage

Dosing information:

One dose of aspirin is 324-325 mg PO
A single dose may be (1) 325-mg tablet or (4) 81-mg tablets ("baby aspirin")

Procedure for administration:

Administer a single dose of aspirin one time during patient contact if indications are met and contraindications are not present
Have the patient chew and swallow the tablet(s). A few small sips of water may be given to help with the administration

Dextrose

Mechanism:

Simple carbohydrate which is metabolized by cells to generate energy

Indications:

Hypoglycemia
Not improving with oral glucose

Contraindications:

Inability to establish IV access

Dosing information:

Adults: 25 – 50 grams IV
Pediatric: 2 mg/kg IV of **Dextrose 10%**

Procedure for administration:

Ensure IV patency
Dextrose 10% is made by injecting 25gm Dextrose 50% into 250mL normal saline *or* wasting 40cc of Dextrose 50% and diluting the remaining solution with normal saline

Diphenhydramine (Bendadryl®)

Mechanism:

Blocks histamine H2 receptor site to block histamine effects caused by allergic reactions **Indications:**

Allergic reaction; anaphylactic shock

Contraindications:

Pregnancy; asthma; central nervous system depressant use

Dosing information:

Adults: 25-50 mg IV/IM

Pediatric: 1-2 mg/kg IV/IM, max dose 50mg

Procedure for administration:

Standard IV or IM administration

May not be repeated

Duoneb® (Premixed 3mg Albuterol and 0.5mL Ipratropium Bromide)

Mechanism:

Albuterol is a beta-adrenergic agonist which results in lower airway bronchodilation and as a result, increased air flow; Ipratropium Bromide is an anti-muscarinic agent which reduces potentially-airway-obstructing mucous production

Indications:

Difficulty breathing secondary to COPD, emphysema, asthma, or allergic reaction

Contraindications:

Allergy to medication, or its derivatives

Dosing information:

Adults: One (1) "bullet" dose (3mg Albuterol + 0.5mg Ipratropium Bromide/3mL); if patient improves, may be repeated up to two times for a total of three (3) doses

Pediatric: One (1) "bullet" dose (3mg Albuterol + 0.5mg Ipratropium Bromide/3mL); if patient improves, may be repeated up to two times for a total of three (3) doses

Procedure for administration:

Add 1 dose (3mg Albuterol + 0.5 mg Ipratropium Bromide) to a small-volume nebulizer; repeat as necessary up to a total of three (3) doses.

Epinephrine 1:1,000; Epinephrine 1:10,000

Mechanism:

Epinephrine works to reverse symptoms of allergic reactions by decreasing airway edema and increasing heart rate & contractility, and constricting blood vessels to improve blood pressure

Indications:

Epinephrine 1:1,000: Moderate to severe allergic reaction

Epinephrine 1:10,000: Cardiac arrest

Contraindications:

Epinephrine 1:1,000: Suspected cardiac ischemia

Epinephrine 1:10,000: None in cardiac arrest

Dosing information:

Epinephrine 1:1,000: (Anaphylactic reaction)

Adult: 0.3 mg IM

Pediatric: 0.15 mg IM

Epinephrine 1:10,000: (Cardiac Arrest)

Adult: 1mg IV

Pediatric: 0.01 mg/kg IV

Procedure for administration:

Epinephrine may be administered every 3-5 minutes as symptoms persist

Auto-injector:

Remove safety cap from auto-injector

Place auto-injector against outside of patient's bare thigh

Press auto-injector firmly against the patient's thigh and hold for 10 seconds

Glucose (Oral)

Mechanism:
Simple carbohydrate which is metabolized by cells to generate energy

Indications:
Hypoglycemia in the conscious patient

Contraindications:
Inability of patient to protect his/her own airway

Dosing information:
One tube (15-30 grams)

Procedure for administration:
Administer one tube orally; re-check/document blood sugar 5-10 minutes following administration

Naloxone (Narcan®)

Mechanism:
Binds to opiate receptors in the brain to block the effects of opiates

Indications:
Suspected opiod overdose with respiratory depression

Contraindications:
Patients with adequate respiratory drive

Dosing information:
1-2 mg IV/IM
4 mg IN

Procedure for administration:
Administer via the most appropriate route given patient presentation, form available, and provider skill level

*Given that naloxone is available via over-the-counter (OTC) dispensation, naloxone supplied in a pre-packaged, FDA-approved intranasal form available to the layperson it is not regulated under this protocol; any person in possession of intranasal form of naloxone may administer such, regardless of medical credentialing, just as with any other OTC medication; parenteral (IV/IM) routes of administration of naloxone are limited to providers who hold AEMT/EMT-I or higher credentials

Nitroglycerine (NitroStat)

Mechanism:

Nitroglycerine works by dilating blood vessels, which lowers blood pressure, increases cardiac blood flow, and reduces the workload on the heart

Indications:

Chest pain

Suspected cardiac ischemia

Contraindications:

Systolic blood pressure < 160 mmHg

Patient has already taken (3) doses of nitroglycerine

Patient has taken erectile dysfunction medications (Viagra/sildenafil, Cialis/tadalifil, or Levitra/vardenafil) within the last 24 hours

Dosing information:

One dose of nitroglycerine is 0.4mg

A single dose may be one tablet or one pump from a metered-dose spray bottle

Procedure for administration:

Administer one dose of nitroglycerine every 5 minutes as symptoms persist unless/until contraindications are present

Normal Saline (Sodium Chloride 0.9%)

Mechanism:

Normal saline works to replenish fluid loss and rebalance electrolytes.

Indications:

Hypovolemia

Dehydration

Hypotension

Contraindications:

Fluid overload

CHF

Dosing information:

20ml/kg to maintain SBP of at least 100mmhg

Procedure for administration:

Establish IV access. Connect 10gtt tubing to NS bag and to IV lock. Flow at desired rate per protocol

Patient Restraint 2.05

Indications:

Any patient who may harm him/herself, first responders, bystanders, or crewmembers may be restrained by EMS providers as reasonably necessary to prevent injury to the patient or crew. Whenever practical, law enforcement personnel should be utilized to restrain the patient if it becomes necessary. Physical restraint should only be used by EMS personnel as a last resort when other methods have failed, and when law enforcement assistance is not immediately available.

Any physical restraint that is performed by EMS personnel must be in a humane manner and used only as a last resort. Other means to prevent injury to the patient or crew must be attempted first including reality orientation, distraction techniques, or other less restrictive therapeutic means.

For the purposes of this protocol, any patient who presents a significant danger to him/herself or others on scene may be physically restrained by EMS personnel as necessary.

When patient restraint becomes necessary, the following procedures shall be used:

1) When at all possible, use techniques which will not cause injury to the patient.
2) Use the minimum amount of force necessary to secure restraints.
3) If not already on scene, request law enforcement assistance as soon as possible.
4) If a patient is restrained by law enforcement personnel with handcuffs or other devices EMS personnel cannot remove, a law enforcement officer must be present until the patient is released from such devices.
5) Ensure that there are sufficient personnel available to physically restrain the patient safely
6) Caution should be used to not restrict the respiratory efforts of the patient.
7) Restrain the patient in a lateral or supine position. Avoid restraining the patient in the prone position.
8) Pulse and other measures to assure distal circulation will be checked frequently following the application of restraints.
9) At the termination of the call, fully document all pertinent details including signatures of witnesses if possible. Documentation should include the reason for the use of restraints, the type of restraints used, and the time restraints were placed.
10) Remember, a restrained patient is totally dependent on the EMS crew for their safety. 11) The patient must be under constant observation by the EMS crew at all times.

Hemostatic Agent 2.06

Hemostatic Agents (Quik-Clot®, HemCon®, etc) may be used by the provider of any skill level to control bleeding which is not controllable through first-line methods of hemorrhage control (direct pressure, limb elevation, tourniquet application). If the provider deems it necessary to utilize such an agent, is it NOT necessary to utilize first-line methods to attempt to control hemorrhaging before utilizing a hemostatic agent.

Guidelines:

The provider should be able to quickly determine if hemorrhaging is likely to be controllable by a hemostatic agent. If hemorrhaging is deemed to be controllable by hemostatic agent, apply hemostatic agent per manufacturer's recommendations. **If hemorrhaging is deemed too severe to be controlled by a hemostatic agent, refer to Tourniquet Application protocol.**

Tourniquet Application 2.07

The ability of pre-hospital providers to rapidly stop life-threatening bleeding is one of the keys for survival of the trauma patient. In the event that a provider believes that bleeding is too severe to be controlled by conventional methods (direct pressure, limb elevation, pressure points), providers may utilize a commercially manufactured OR improvised tourniquet device to control bleeding. **If the provider deems it necessary to use a tourniquet, it is NOT necessary to utilize first-line methods to attempt to control hemorrhaging before utilizing a tourniquet.**

In the case of an amputation with uncontrolled bleeding, a tourniquet should be applied immediately. Tourniquets should be applied as high on the affected limb as possible; if bleeding cannot be controlled with one tourniquet, a second one may be applied distal to, and as close as possible to the first.

Guidelines:

Commercially-available (CAT®, SOFT-T®, etc) tourniquets

1) Expose the extremity by removing clothing near the injury.
2) Position the device directly over exposed skin at least 5 cm proximal to the injury.
3) Route the self-adhering band around the extremity.
4) Pass the band through the outside slit of the buckle.
5) Pull the self-adhering band tight.
6) Twist the rod until bright red bleeding stops.
7) Check for a pulse distal to the extremity; if a pulse is present, continue to tighten the tourniquet until the pulse disappears.
8) Lock the rod in place with the clip.
9) Record the date/time of application and relay this information to the transporting EMS crew.

Improvised Tourniquet

1) Unwrap a triangle bandage, and roll it lengthwise
2) Tie the bandage around the affected extremity with a half-hitch
3) Place a long, thick rod or stick, or the cutting end of a pair of trauma shears on top of the knot; this is known as the “windlass”
4) Tie a second half-hitch on top of the windlass
5) Twist the windlass until the bright red bleeding stops
6) Check for a pulse distal to the extremity; if a pulse is present, continue to tighten the tourniquet until the pulse disappears.
7) Tape or tie the windlass in place such that it cannot be accidentally dislodged
8) Record the date/time of application and relay this information to the transporting EMS crew.

Oxygen Administration 2.08

Some systems consider oxygen to be a medication. Since it is relatively available to the public, oxygen is not considered a medication under these protocols. Oxygen may be administered by any provider credentialed in this system to any patient per protocol to maintain oxygen saturation above 94% (90% for COPD patients).

Spinal Motion Restriction 2.09

Spinal motion restriction may be performed at the provider's discretion on any patient with a mechanism of injury which suggests a possible spinal injury. Patients with a significant mechanism of injury and a complaint that includes neck pain, back pain, numbness, tingling, or other neurological symptom should have spinal motion restriction performed, unless the provider deems that doing so would hinder the ability to administer care or further harm the patient. A "significant mechanism of injury" includes, but is not limited to:

- Falls of greater than 3 times the patient's height
- High-speed motor vehicle collisions
- Rollover accidents
- Auto-versus-pedestrian/motorcycle/bicycle accidents

When performing spinal motion restriction, the following guidelines should be followed:

- Initiate manual spinal stabilization by holding the patient's head and instructing the patient not to move his/her head
- Place an appropriately sized cervical collar on the patient
- When placing the patient on a backboard, roll the patient as a unit, with the provider at the patient's head directing the effort
- Backboards should NOT be routinely used, and should be reserved for patients with a mechanism of injury **AND** neurological deficit
- If a backboard is used to extricate/move a patient, it should be removed as soon as practical unless neurological deficit is present

Diagnostic Tests 3.01

All diagnostic tests listed below are assessment tools which may be used at the discretion of any provider when the equipment is available.

Blood pressure determination

Blood pressure determination should be the primary method of determining perfusion status for most patients. Patients on whom blood pressure is obtained should have at least one set of vital signs including the blood pressure documented during patient contact. Blood pressure should be checked following the administration of all medications. While blood pressure is an excellent tool to evaluate an adult patient's perfusion status, it is less useful in pediatric patients.

Pulse oximetry

Pulse oximetry is an assessment tool to assess the patient's oxygenation before and after oxygen administration. It should not be used to replace good judgment or determine whether or not the patient requires oxygen. Regardless of the pulse oximetry reading obtained, oxygen should not be withheld from any patient presenting with signs or symptoms which indicate the need for oxygen, especially patients exhibiting cardiac or respiratory complications or altered mental status. Pulse oximetry readings can be altered by carbon monoxide poisoning, decreased blood pressure, cold extremities, and the inability of the sensor to take an accurate measurement, such as when the patient is wearing fingernail polish.

Blood glucose determination

Blood glucose determination may be performed on any patient deemed necessary by the provider, with primary emphasis on patients with altered mental status, lightheadedness/ dizziness/syncope and those suspected of suffering from hypo/hyperglycemia, seizures, or stroke.

Temperature determination

Temperature may be obtained on any patient deemed necessary by the provider, with primary emphasis on patients suffering from environmental emergencies, elderly patients with altered mental status, and pediatric seizures. It is preferable to obtain an oral temperature by placing the tip of the thermometer under the patient's tongue, although an axillary temperature may be obtained by placing the tip of the thermometer in the patient's armpit with the patient's arms to his/her side. The method used to obtain the temperature should be documented regardless of which is used.

General Patient Assessment 3.02

General guidelines for the assessment of all patients

I. Scene size-up/assessment

A. Body substance isolation
B. Scene safety
C. Mechanism of injury/Nature of illness
D. Number of Patients (call for help as needed)
E. Personnel safety

II. Initial Patient Assessment.

A. Rapid initial assessment to identify and correct any life threatening medical or traumatic emergencies, evaluate the patient's chief complaint, and form a general impression B. Central nervous system evaluation to include:

1. Level of consciousness and mental status
2. Sensory response
3. Motor response

C. Airway / breathing evaluation to include:

1. Presence or absence of breathing efforts
2. Rate of respirations
3. Depth of respirations
4. Regularity of respirations
5. Auscultation of breath sounds

D. Circulatory evaluation to include:

1. Presence or absence of pulse
2. Rate of pulse
3. Strength of pulse
4. Regularity of pulse

General Patient Assessment 3.02

III. Patient Assessment.

A. Reassess the chief complaint

B. Perform a detailed physical exam or a focused physical exam as indicated by the patient's condition. A detailed physical exam should include is a complete head to toe survey with emphasis on the body system affected by the chief complaint.

C. Assess vital signs.

1. Respirations (rate, quality, rhythm)
2. Pulse (rate, quality, rhythm)
3. Blood pressure and/or capillary refill
4. All patients evaluated by Brazos County EMS personnel shall have a minimum of one set of vital signs recorded as time and patient condition allows (it is the intent of this protocol that a set of vital signs be obtained on all patients). Any seriously injured or ill patient shall have vital signs recorded at 5-10 minute intervals.

D. Assess/document SAMPLE History.

IV. Additional Assessment

A. Additional assessments which may be indicated by the patient's condition when equipment is available.

1. Pulse oximetry
2. Blood glucose determination
3. Temperature determination

Results of all assessments shall be documented in the patient care report.

Glasgow Coma Scale: Adult 3.03

Condition	*Variable*	*Score*
Eye Opening	Spontaneous	4
	To Voice	3
	To Pain	2
	No Response	1
Best Verbal Response	Oriented	5
	Confused	4
	Inappropriate Words	3
	Incomprehensible Words	2
	No Response	1
Best Motor Response	Obeys Commands	6
	Localizes Pain	5
	Withdrawal	4
	Flexion (Decorticate Rigidity)	3
	Extension (Decerebrate Rigidity)	2
	No Response	1

Revised Trauma Score: Adult 3.04

Revised Trauma Score: Adult		
Condition	***Variable***	***Score***
Respiratory Rate (Breaths/min)	10 - 24	4
	23 - 35	3
	=> 36	2
	1-9	1
	0	0
Systolic BP	> 89	4
	70 - 89	3
	50 - 69	2
	1 - 49	1
	0	0
Glasgow Coma Scale Score Conversion	13 - 15	4
	9 - 12	3
	6 - 8	2
	4 - 5	1

	< 4	0

Glasgow Coma Scale: Pediatric 3.05

Glasgow Coma Score: Pediatric

Condition	*Variable Age >1*	*Variable Age <1*	*Score*
Eye Opening	Spontaneous	Spontaneous	4
	To Voice	To Voice	3
	To Pain	To Pain	2
	No Response	No Response	1
Motor Response	Obeys Commands	Obeys Commands	6
	Localizes Pain	Localizes Pain	5
	Withdrawal	Withdrawal	4
	Flexion (Decorticate Rigidity)	Flexion (Decorticate Rigidity)	3
	Extension (Decerebrate Rigidity)	Extension (Decerebrate Rigidity)	2
	No Response	No Response	1

Condition	*Age >5 years*	*Age 2 - 5 years*	*Age 0 - 23 months*	*Score*
Verbal Response	Oriented	Appropriate Words and Phrases	Smiles, Coos, Cries Appropriately	5

	Confused	Inappropriate Words	Cries	4
	Inappropriate Words	Cries and/or Screams	Inappropriate Crying and/or Screaming	3
	Incomprehensible Words	Grunts	Grunts	2
	No Response	No Response	No Response	1

Trauma Score: Pediatric & APGAR Score 3.06

Pediatric Trauma Score			
Assessment	***Score***		
	+ 2	**+ 1**	**- 1**
Weight	> 44 lb (> 20 kg)	22 - 44 lb (10-20 kg)	< 22 lb (< 10 kg)
Airway	Normal	Oral Airway Nasal Airway	Intubated Tracheostomy Invasive
Blood Pressure	Pulse at Wrist > 90 mmHg	Carotid or Femoral Pulse 50 - 90 mmHg	No Palpable Pulse < 50 mmHg
Level of Consciousness	Completely Awake	Obtunded or any Decreased level of consciousness	Comatose
Open Wound	None	Minor	Major or Penetrating
Fractures	None	Closed Fracture	Open or Multiple Fractures

APGAR Score			
Sign	**0**	**1**	**2**
Appearance	Blue, Pale	Body Pink, Extremities Blue	Completely Pink
Pulse Rate	Absent	Below 100	Above 100
Grimace	No Response	Grimaces	Cries
Activity	Limp	Some Flexion	Active Motion
Respiratory	Absent	Slow and Irregular	Strong Cry

Cincinnati Stroke Scale 3.07

If a patient shows abnormal signs in any one of the assessments, consider the patient Cincinnati Stroke positive and refer to **Stroke/CVA** protocol. Relay information to incoming ambulance

Cincinnati stroke scale

	Normal	Abnormal
Facial Droop	Both sides of face move equally	One side of face does not move at all
Arm Drift	Both arms move equally or not at all	One arm drifts separately from the other
Speech	Uses correct words with no slurring	Slurred or inappropriate words

Altered Mental Status 4.01

When possible, the provider should attempt to determine the reason for altered mental status. If a reason for the altered mental status can be identified which is covered by another protocol, refer to that protocol for more specific treatments.

EMR:

- Consider spinal immobilization
- Administer oxygen as necessary
- Assess vital signs
- Blood glucose determination
    - If blood glucose <60 mg/dL, refer to **Diabetic Emergency** protocol.
- Preform stroke assessment, if Cincinnati stroke scale or VAN positive, refer to **Stroke/CVA** protocol
- If patient cannot protect his/her own airway, ventilate with airway adjunct (OPA/NPA) and BVM at a rate of 12-15 breaths per minute

EMT: (Including EMR)

- If patient cannot protect his/her own airway and gag reflex is not present, consider Blind Insertion Airway Device

AEMT: (Including EMR/EMT)

- Establish IV access
- NS @ 20ml/kg if indicated to maintain SBP at least 100mmhg

Allergic Reaction 4.02

The provider should attempt to determine the cause of the allergic reaction, if possible. If it is possible to remove the patient from the cause of the allergic reaction, the provider should attempt to do so. Common causes of allergic reactions include latex, peanuts, shellfish, and insect bites/stings.

EMR

- Assess responsiveness, including ABC's
- Administer oxygen as necessary
- If patient's respirations are insufficient, assist ventilations with BVM at a rate of 12-15 breaths per minute
- If no gag reflex is present, insert airway adjunct
  - If patient accepts airway adjunct
- Assess vital signs
- Place patient in position of comfort
- Pulse oximetry, if available
- If wheezing present, Administer Albuterol 2.5mg via nebulizer x1, if no relief, attempt DuoNeb 3ml x2
- If anaphylaxis (Severe reaction) Epi 1:1,000
  - **Adult:** 0.3 – 0.5 mg IM, may repeat in 3-5 mins as symptoms persist
  - **Pediatric:** 0.15 – 0.30 mg IM, may repeat in 3-5 mins as symptoms persist

EMT: (Including EMR)

- Consider Supraglotic airway (BIAD)

AEMT: (Including EMR/EMT)

- Establish IV access
- Diphenhydramine (Benadryl):
  - **Adult:** 25-50mg IV/IM
  - **Pediatric:** 1-2 mg/kg IV/IM, max dose 50mg
- NS bolus to maintain SBP at least 100mmhg

Mild Reaction: (Wheezing)
Moderate Reaction: (Wheezing, Urticaria)
Severe Reaction: (wheezing, urticaria, bronchospasm, stridor, hypotension)

Animal Bite/Sting 4.03

General Care:

- Assess responsiveness, including ABC's
- Administer oxygen, if indicated
- Place patient in position of comfort
- If signs of allergic reaction are present, refer to **Allergic Reaction** protocol
- Pulse oximetry, if available
- Control bleeding and dress wounds as necessary

If venomous animal bite/sting:

- Attempt to identify the animal which bit/stung the patient
- Remove tight clothing and jewelry.
- Splint limb and place in a dependent position below the level of the heart.
- Assess distal pulse, motor, and sensory functions before and after splinting.

Cardiac Arrest 4.04

The survival rates of out-of-hospital cardiac arrest are very low. The patient's best chance of survival and returning to a normal life are centered on the performance of high-quality CPR and early defibrillation.

EMR:

- Assess responsiveness, with ABC's
- Initiate or continue CPR, with emphasis on chest compressions
- Place patient is on the ground, a backboard, or other hard surface
- If available, connect an AED and follow instructions of the AED
- Ventilate the patient with airway adjunct and BVM at a rate of 12-15 breaths per minute
- If available, utilize pulse oximetry to evaluate the effectiveness of CPR

EMT: (Including EMR)

- If available, utilize **Blind-Insertion Airway Device**, while minimizing interruptions in chest compressions
- If available, utilize pulse oximetry to evaluate the effectiveness of CPR

AEMT: (Including EMR/EMT)

- Establish IV access and administer NS bolus 20ml/kg. Do so with minimal interruptions in chest compressions
- If inadequate compliance with supraglottic airway, consider intubation

EMT-P: (Including EMR/EMT/AEMT)

- Adult: Epinephrine 1:10,000 1mg IV every 3-5 minutes throughout arrest.
- Pediatric: Epinephrine 1:10,000 0.01mg/kg IV every 3-5 minutes throughout arrest

Chest Pain 4.05

Providers treating patients experiencing chest pain should operate under the assumption that the patient is experiencing a cardiac event until proven otherwise.

EMR:

- Assess responsiveness, with ABC's
- Administer high-flow oxygen if necessary to maintain pulse oximetry above 94% (90% in COPD patients)
- Assess vital signs
- Place patient in position of comfort
- Pulse oximetry, if available
- **Aspirin:** 324-325 mg PO
- If systolic blood pressure is greater than **160 mmHg**:
  - **Nitroglycerine:** 0.4 mg SL, up to 3 times total while chest pain persists

AEMT: (Including EMR/EMT)

- Establish IV access and administer fluid bolus @ 20ml/kg to maintain SPB at least 100mmhg

Diabetic Emergencies 4.06

Diabetic emergencies can be classified as hypoglycemia (low blood sugar) or hyperglycemia (high blood sugar). Either can be equally harmful, although in the short term, hypoglycemic patients are easier to identify and treat. The classic signs of low blood sugar include pale skin, sweating, and confusion/altered mental status.

EMR:

- Assess responsiveness, with ABC's
- Administer oxygen, if indicated
- Assess vital signs, including blood glucose if available
- Place patient in position of comfort
- If blood glucose is less than 60 mg/dL **AND** the patient is conscious and able to follow commands, administer 1 tube (15-25gm) of **Oral Glucose**
    - In the absence of **Oral Glucose**, the provider may give the patient small sips of fruit juice.

AEMT: (Including EMR/EMT)

- Establish IV, Administer fluid bolus @ 20ml/kg to maintain SBP at least 100mmhg
- If patient is hypoglycemic and not responsive to oral glucose, administer **Dextrose**:
- Adult: **Dextrose 10%** or **Dextrose 50%:** 25g IV
- Pediatric:
    - < 1 year: **Dextrose 10%:** 2 mL/kg IV
    - >1 year: **Dextrose 10%:** 5 mL/kg IV, max dose 12.5g

Environmental Emergencies 4.07

Environmental emergencies may present in either warm or cold weather, and extreme temperatures are NOT necessary to cause an environmental emergency.

When dealing with cold exposure, extended exposure to relatively mild temperatures may result in hypothermia, especially in the very young or very old.

When dealing with heat emergencies, high exertion in moderately warm temperatures with high humidity may result in a heat emergency. The key difference between heat exhaustion and heat stroke is that in heat exhaustion, sweating is still present and the patient has normal mental status, while heat stroke is defined as the presence of altered mental status. Heat stroke must be treated rapidly.

General Care:

- Assess responsiveness, with ABC's
- Administer oxygen, if indicated
- Assess vital signs
- Place patient in position of comfort

- **If cold exposure:**
  - Remove patient from cool environment/move to a warm environment if possible
  - If clothing is wet and replacement clothing or blankets are available, remove wet clothing
  - Cover the patient with blankets to ensure no additional heat is lost

- **If heat exposure:**
  - Remove patient from warm environment if possible
  - If altered mental status is **not** present, initiate **passive** cooling by removing clothing and cooling the patient with fans, cool mist and/or wet towels
  - If altered mental status is present, initiate **active** cooling by removing clothing by removing clothing, cooling the patient with fans, and applying ice packs to the groin, armpits, and neck

  AEMT:

  - Establish IV, Administer fluid bolus @ 20ml/kg to maintain SBP at least 100mmhg

BRAZOS COUNTY FIRST RESPONDER MEDICAL PROTOCOL

SOUTH BRAZOS COUNTY ESD 1 FD, DISTRICT TWO VFD, PRECINCT THREE VFD, PRECINCT FOUR VFD

General Medical 4.08

Patients with complaints which are not readily identifiable or which do not fit under any other protocol may be treated under this protocol.

General Care:

- Assess responsiveness, with ABC's
- Consider spinal precautions if indicated
- Administer oxygen if indicated
- Assess vital signs, including blood glucose if available
- Place patient in position of comfort
- Refer to appropriate protocol if other complaints or symptoms are identified

OB Emergencies 4.09

Any pregnant female with non-traumatic abdominal pain should be evaluated. The following pieces of information are important to obtain: Prenatal care, last menstrual period, due date, any recent illnesses or unusual events, prior pregnancies (if so, how many and if any complications), any sensation to push or move bowels, has water broken (if so, when), any contractions or other pains?

General Care:

- Assess responsiveness, with ABC's
- Administer oxygen, if indicated
- Assess vital signs, including blood glucose if available
- Place patient in position of comfort

Emergency Childbirth

- Prepare mother for delivery by placing her supine with legs elevated and knees separated •
Carefully assist newborn from birth canal in its natural progression.
- Apply gentle pressure to the newborn's head to prevent delivery too rapidly and perineal trauma •
After the head emerges, suction the child's airway – mouth first, then nose
- Gently guide the head downward to assist the upper shoulder to deliver
- Gently guide the head upward to assist the lower shoulder to deliver
- Once newborn is delivered, hold the child at close to the same vertical level as the vagina, clamp •
the cord at 6" and 8" from the navel and cut the cord between the clamps.

Prolapsed Cord/Limb Presentation

- Do not attempt to push the cord back in
- Insert two gloved fingers into the vagina, raise the presenting part of the fetus off the cord and check for cord pulse.
- Push baby's head away to keep pressure off cord and maintain during transport.
- Place mother in knee-chest position.
- Keep pressure off the cord and keep cord moist with sterile saline.

OB Emergencies 4.09

Breach Birth

- Imminent delivery, assist mother in holding legs in flexed position. As infant delivers, support legs, but do not pull.
- Allow entire body to deliver in this manner. As the head passes the pubis, gentle upward traction until mouth appears over the perineum.
- If the head does not deliver, and spontaneous breathing begins, place a gloved hand in the vagina with the palm toward the infant's face. Form a "V" on either side of the infant's nose pushing the vaginal wall away from the infant's face.

Post-childbirth care

- Suction mouth first, then the nose
- Note the time of delivery, dry and wrap the newborn to preserve body temperature.
- Perform an APGAR assessment at 1 and 5 minutes post delivery
- If the placenta delivers, ensure it is transported to the hospital with the mother and newborn

Vaginal bleeding

- Pre-delivery bleeding should be documented with the gestation time and the presence or absence of pain • Post-delivery bleeding should be controlled with uterine massage or encouraging the baby to nurse

Overdose/Poisoning 4.10

Don't become a victim! Ensure the environment is safe prior to approaching the scene!

EMR:

- Assess responsiveness, with ABC's
- Administer oxygen, if indicated
- If patient cannot protect his/her own airway:
  - Ventilate with airway adjunct and BVM at a rate of 12-15 breaths per minute
  - If gag reflex is not present, consider OPA/NPA
- Assess vital signs
- Place patient in position of comfort
- Refer to appropriate protocol if other complaints or symptoms are identified
- If patient is contaminated with dry chemical, brush off
- If patient is contaminated with a liquid chemical, flush with copious amounts of water • Consider contacting Poison Control (800-222-1222) for specific instructions
- Look for/bring any pill bottles or medications in the vicinity of the patient
- If suspected opiate overdose AND respiratory depression consider **Naloxone (Narcan®)**:
  - Adult: **Naloxone (Narcan®):** 4 mg IN, may repeat as needed to restore respiratory drive.

EMT: (Including EMR)

- If patient cannot protect his/her own airway and has no gag reflex, consider Supraglotic airway (BIAD)

AEMT: (Including EMR/EMT)

- Establish IV access, Administer fluid bolus of 20ml/kg to maintain SBP at least 100mmhg
- Adult: Administer Narcan 1-2mg IV/IM
- Pediatric: Administer Narcan 0.01mg/kg IV

Respiratory Distress 4.11

All patients experiencing respiratory distress should receive supplemental oxygen as appropriate for the amount of distress.

General Care:

- Assess responsiveness, with ABC's
- Administer high-flow oxygen
- Assess vital signs
- Place patient in position of comfort
- Refer to appropriate protocol if other complaints or symptoms are identified
- If respiratory distress is due to an allergic reaction, refer to **Allergic Reaction** protocol
- If respiratory distress is due to suspected cardiac ischemia, refer to **Chest Pain** protocol
- If wheezing is present:
  - **Albuterol:**
    2.5 mg via small volume nebulizer
    1 puff from metered dose inhaler
    Either may be repeated up to two times for a total of three (3) doses
    or
  - **Duoneb:**
    3mL via small volume nebulizer

Seizures 4.12

All first time seizures, or seizures associated with a fever must be evaluated by a physician. Active seizure witnessed by EMS and lasting 5 minutes, OR status epileptics (repetitive seizures without regaining consciousness) are considered a life-threatening emergency and should be treated as such.

Assessment of a seizure patient should include the presence of fever, a history of seizures, the duration of seizure, the activity during the seizure (localized or full-body), more than one seizure, any medications being taken, recent trauma (particularly to the head), unusual recent stress.

The patient may be post-ictal and may be unresponsive or have disorientation and combativeness for a period of time after a seizure.

General Care:

- Assess responsiveness, with ABC's
- Administer oxygen as necessary
- Assess vital signs, including blood glucose if available
    - If blood glucose is less than 60 mg/dL, refer to **Diabetic Emergency** protocol
- Place patient in position of comfort
- Do not attempt to restrain the patient unless required for provider safety
- Remove objects from the immediate vicinity of the patient to prevent injury

Shock: Non-Trauma 4.13

"Shock" is defined as a reduced blood flow to the tissues of the body and can be caused by a loss of blood or fluid, anaphylaxis, decreased cardiac output, sepsis, or a neurological disorder. Regardless of the cause, in the BLS pre-hospital environment, the treatment is the same.

Shock can often be identified by low blood pressure, cool/pale/clammy skin, and altered mental status.

EMR:

- Assess responsiveness, with ABC's
- Administer oxygen as necessary
- Assess vital signs, including blood glucose
  - If blood glucose is less than 60 mg/dL, refer to **Diabetic Emergency** protocol
- Prevent heat loss by covering the patient
- If evidence of anaphylaxis reaction is present, refer to **Allergic Reaction** protocol

AEMT: (Including EMR/EMT)

- Establish IV access
- If patient is hypotensive (SBP <90mmHg), administer fluid bolus at 20ml/kg
  - Repeat as needed to maintain SBP at least 100mmHg

Stroke/CVA 4.14

A stroke is caused by the lack of blood flow to a particular part of the brain, and may be caused either by a clot in a blood vessel in the brain, or a blood vessel bleeding into the brain. Either case can be life-threatening, and should be identified as quickly as possible; the earlier a stroke is identified, the better chance the patient has of recovery.

Three of the most common signs of a stroke are facial droop, slurred speech, and arm drift.

EMR:

- Assess responsiveness, with ABC's
- Preform **Cincinnati Stroke Scale**
- Administer oxygen as necessary
- Assess vital signs, including blood glucose
- If blood glucose is less than 60 mg/dL, refer to **Diabetic Emergency** protocol
- If ground transport time is expected to exceed 45 minutes, consult with responding ambulance crew and consider air transport

AEMT: (Including EMR/EMT)

- Establish IV access, administer fluid bolus to maintain SBP at least 100mmhg

Trauma: General Guidelines 4.15

Administer oxygen as appropriate for patient condition. In the case of a traumatic injury with major bleeding, high-flow oxygen is indicated, but it is not required for minor injuries without associated difficulty breathing.

Apply airway procedures as appropriate for patient condition. In patients with airway and/or breathing compromise, consider managing the airway with an appropriate airway adjunct and BVM. Maintaining circulation and airway are important to the success of patient management.

Spinal motion restriction should be evaluated using the **Spinal Motion Restriction** protocol. If the patient requires immobilization, the provider should provide this with a backboard and cervical collar along with webbing, tape, straps, or other mechanism for securing the patient. A complete patient assessment, either focused or “head to toe”, should be performed on all patients as time and situation allows.

For critical patients with entrapment or in a situation where ground transport time is expected to exceed 45 minutes, consider air ambulance activation.

Uncontrolled external bleeding or amputation requires application of a tourniquet. Once applied, do not remove the tourniquet.

Amputations 4.16

Early helicopter activation should be considered for all patients who experience a traumatic amputation or de gloving injury to give the patient the best chance at re-attachment of the limb.

EMR:

- Assess responsiveness, with ABC's
- Administer oxygen as necessary
- Control bleeding with **Tourniquet Application**
- Consider spinal motion restriction
- Assess vital signs
- Place patient in position of comfort
- If possible, wrap amputated part in a clean, dry dressing, and place on ice; use caution to ensure tissue doesn't come into direct contact with ice

AEMT: (Including EMR/EMT)

- Establish IV access, administer fluid bolus to maintain SBP at least 100mmhg

Burns 4.17

Early helicopter activation should be considered for all patients with 2nd or 3rd degree burns which meet the following criteria:

- Hands, feet, face, or genitals
- Encircling the chest or limb
- More than 20% of the body

EMR:

- Assess responsiveness, with ABC's
- Administer oxygen as necessary
- Assess vital signs
- Stop the burning process and remove the patient from the source of the injury, if safe to do so. •

Dress wounds:

  - 2nd or 3rd degree <10% BSA, use wet sterile dressing
  - 2nd or 3rd degree >10% BSA, use dry sterile dressing

- Remove any items that may cut off circulation with swelling; do not remove items that have bonded with skin; instead, cut from around these areas.
- Cover the patient to maintain body heat

Electrical burns:

- Identify potential entry and exit wounds.

Chemical burns:

- Brush off dry chemical and flush with copious amounts of water.
- Flush other chemicals with copious amounts of water.
- Eyes should be flushed for a minimum of 20 minutes.

AEMT: (Including EMR/EMT)

- Establish IV access,. Initial fluid bolus of 20ml/kg
- Fluid resuscitation based on the "Parkland burn formula" -2-4ml X kg X % BSA = amount to be infused

Eye Injuries 4.18

Any injury to the eye, other than burns, should be treated under this protocol.

General Care:

- Assess responsiveness, with ABCs.
- Administer oxygen as necessary.
- Assess vital signs.
- Place patient in a position of comfort.

Specific Care:

- Open eye injury: cover both eyes.
- Chemical burns: flush continuously with water or normal saline.
- Impaled object: stabilize object in place and cover both eyes.

Musculoskeletal Injuries 4.19

General Care:

- Assess responsiveness, with ABC's.
- Administer oxygen as necessary.
- Assess vital signs.
- Place patient in a position of comfort.

Specific Care:

- Assess pulse, motor, and sensation distal to the injury.
- Do not attempt to reduce dislocations.
- Splint injured extremities in the position found or position of comfort.
- An ice pack may be applied to reduce swelling.

Submersion Injuries/Near Drowning 4.20

Drowning is defined as death secondary to submersion; near drowning is defined as a submersion accident with the recovery of vital signs and survival greater than 24 hours after the incident. Additional factors in drowning or near drowning patient are trauma secondary to surface impacts, spinal cord injuries, orthopedic and tissue injuries, etc. Survival is based on early access and aggressive management of these patients. Helicopter activation should be considered in near-drowning patients.

EMR:

- Assess responsiveness, with ABC's.
- Initiate or continue CPR if indicated.
- Administer oxygen as necessary.
- Ventilate the patient with airway adjunct (OPA/NPA) and BVM at a rate of 12-15 breaths per minute if indicated.
- If available, utilize pulse oximetry to evaluate the effectiveness of CPR.
- If Pulseless and apenic, refer to **Cardiac Arrest** protocol

EMT: (Including EMR)

- If available and indicated, utilize **Blind-Insertion Airway Device**, while minimizing interruptions in chest compressions.

AEMT: (Including EMR/EMT)

- Establish IV access, Administer fluid bolus to maintain SBP at least 100mmhg