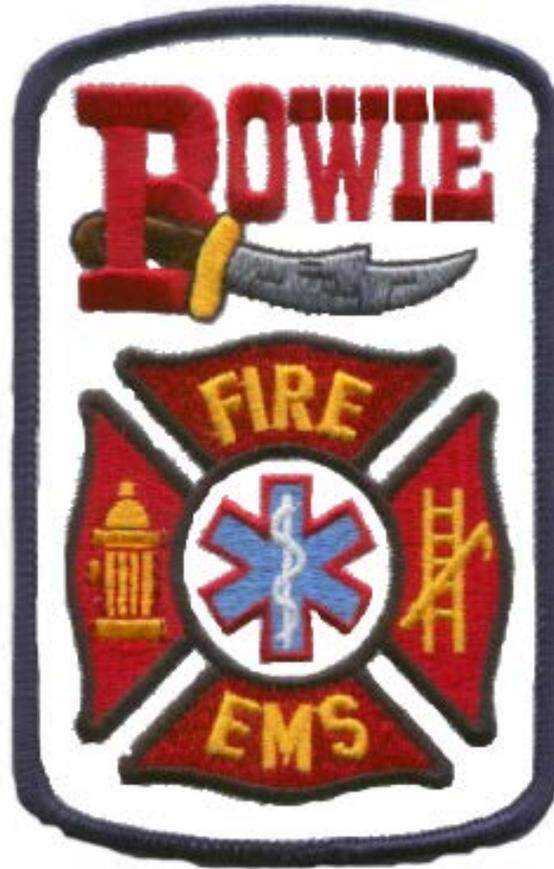


CITY OF BOWIE
FIRE DEPARTMENT
EMS PROTOCOLS

DR. AUJLA



Effective: July 1, 2016
Expires: July 31, 2018

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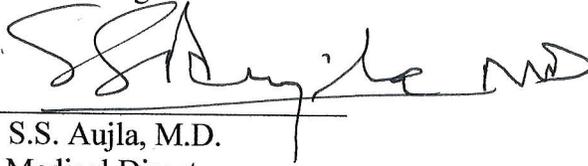
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Bowie, Texas 76230

The following equipment has been approved for utilization by the
Bowie Fire Department - EMS Division

<u>Equipment</u>	<u>Quantity</u>
Lifepak 12/15 AED Capable with accessories	1
Accu-check with lancets and chemstrips	1
Laryngoscope - Adult	1
Laryngoscope - Pedi	1
Endotracheal Tubes - Sizes 3.0 mm - 9.0 mm	1
Combitube	1
Misty Nebulizer	1
Pulse Oximeter	1
Angiocaths -	
14ga	2
16ga	2
18ga	2
20ga	2
22ga	2
24ga	2
10 gtt/ml Administration sets	2
60 gtt/ml Administration sets	2
Buretrol	1
Syringes -	
1 cc	2
3cc	2
10 (12) cc	2
20 cc	2
Hypodermic Needles -	
18ga	2
21ga	2
25ga	2
Vacutainers and Needles	1
Nu-Trake	1
Bone Injection Gun	1
Sternal I.O.	1
EZ-IO	1
King Vision System	1
Autovent with CPAP	1
CPAP	1

Approved and in Effect

07-01-2016 through 07-31-2018

A handwritten signature in black ink, appearing to read "S.S. Aujla, M.D.", written over a horizontal line.

S.S. Aujla, M.D.
Medical Director

Bowie Fire Department

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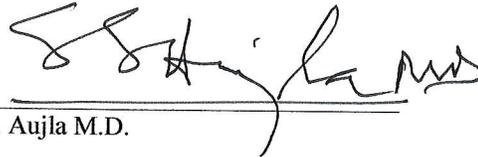
The Following Drugs have been approved for use by the City Of Bowie
Fire Department EMS Division Career Personnel

Effective 07-01-2016
Expies 07-31-2018

APPROVED DRUGS	AMOUNT	TOTAL
Activated Charcoal 50 grams	bottle	1
Adenosine 6 mg	MDV	2
Amiodarone 100mg	SDV	1
Aminophylline 500 mg	SDV	1
Anectine 200 mg	SDV	1
Aspirin 81 mg	Tablet	1
Ativan 2 mg/ml	SDV	1
Atropine 0.4mg/ml	MDV	1
Atropine 1.0 mg	10 cc preload	2
Atrovent 500 mcg	2.5 – 3 cc prefill	1
Benadryl 25 mg	SDV	1
Demerol 100 mg	SDV/Turboject	2
Dextrose 5% in water (D5W)	250 ml bag	2
Dextrose 5% and 0.45% Normal Saline (D51/2NS)	1000 ml bag	2
Dextrose 50% in water (D50W) 25 Grams	SDV	1
Dopamine 800 mg	500 ml bag	1
Epinephrine 1:1,000 1 mg	SDV	1
Epinephrine 1:1,000 30 mg/30ml	MDV	1
Epinephrine 1:10,000 1 mg	10 cc preload	1
Etomidate 40 mg	SDV	1
Fentanyl 50mcg/ml	SDV	1
Glucagon 1 unit	SDV	1
Ketamine 200 mg	SDV	1
Labetolol 100 mg	SDV	1
Lactated Ringers	1000 ml bag	2
Lasix 40 mg	SDV	1
Lidocaine 100 mg	10 cc preload	2
Lidocaine 4 mg/ml	500 cc premix	1
Lopressor 5mg/ml	SDV	2
Magnesium Sulfate 5 grams	SDV	1
Morphine 10 mg	SDV Turboject	2
Narcan 2 mg	SDV	1
Nitroglycerine 0.4 mg	Spray	1
NitroStat 0.4 mg	Bottle	1
Nitropaste	Tube	1
Normal Saline	1000 ml bag	2
Phenergan 25 mg	SDV	1
Pitocin 10 units	SDV	1
Plavix 300 mg	Tablet	2
Pronestyl 500 mg	MDV	2

Continued on next page

Rocuronium 100 mg	MDV	1
Romazicon 0.5 mg	SDV	1
Simvastatin 80mg	Tablet	2
Sodium Bicarbonate 50mEq	500 cc preload	1
Solu-Medrol 500 mg	SDV	2
Stadol 2 mg	SDV	1
Terbutaline 1 mg	SDV	1
Thiamine 100 mg	SDV	1
Toradol 60 mg	SDV	2
Valium 10 mg	SDV	1
Vasopressin 40 units	SDV	1
Vecuronium 10 mg	SDV	2
Ventolin 2.5 mg	3 cc prefill	1
Verapamil 5 mg	SDV	1
Versed 5 mg	SDV	1
Xopenex 1.25 mg	3cc prefill	1
Zophran	SDV	2



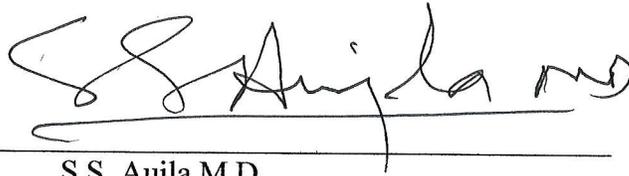
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The following standing order protocols, having an effective date of
07/01/2016 and shall expire 07/31/2018,
are hereby approved and in effect as of the 12th day of April, 2016.

A handwritten signature in black ink, appearing to read "S.S. Aujla M.D.", is written over a horizontal line. The signature is cursive and includes a large initial "S" and a distinct "Aujla" followed by "M.D." and a flourish.

S.S. Aujla M.D.

Effective 07-01-2016
Expires 07-31-2018

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EMS Provider Roles and Responsibilities

It is the ultimate responsibility of the EMS provider to administer prompt, efficient, and professional life saving techniques to the best of his/her ability whether on scene, in the ambulance, or in the emergency department until relieved by a licensed physician, physician's assistant or the RN assigned to the emergency department.

The paramedic is, while on scene or en-route to the hospital, in charge of patient care until properly relieved by a licensed physician. This means that unless other parties on the scene have the same Texas Department of Health Certification, the paramedic in charge should not be hindered by anyone.

Furthermore, it is the responsibility of the paramedic in charge to decide by using his/her best judgment whether or not to render treatment or transportation. This regards the paramedic's judgment in the use of Aero-medical EMS units to transport patients to the nearest facility staffed and equipped to handle the patient's medical needs.

The first paramedic on the scene is in charge of the medical aspect of that scene unless relieved by an equally trained officer or the Director of the Service. If the first paramedic on scene is not a working paramedic in the area's system then he/she is in charge of the medical aspect of that scene until relieved by the first primary provider that arrives from the system which he/she is in.

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General Information

1. Never perform any step in these protocols that you are not certified and trained to perform, or any step that you have questions about.
2. The following protocols are general guidelines and procedures. It is the EMT, EMT-I or EMT-P's responsibility to delete, change the order of, or have the **on-duty ED physician or PA** add to any of the protocols where applicable.
3. Any questions about medications or dosages should be directed to the on-duty ED physician or PA via radio or telephone. **DO NOT GUESS.**
4. When starting an IV, it is always advisable to draw blood for the appropriate laboratory studies.
5. When giving medications, the patient should be on the heart monitor and it is strongly advisable to have an IV lifeline in place when possible.
6. On scene physician. What to do:

Advise the physician that you are a certified or licensed paramedic trained in advanced life support procedures, that your actions are guided by a physician Medical Director with written protocols, and that you are in contact with the emergency department. Acknowledge their desire to help, but advise them that you cannot work outside of your protocols without their providing you with their identification as a physician, and that they will have to contact the emergency department physician and accompany the patient to the hospital with you.

In the event that an on scene physician cannot properly identify him or herself, and said physician poses a detriment to patient care, said physician may be escorted from the scene by law enforcement officials, at the paramedic's discretion.
7. Minor involved patient, parent not present:

If patient is under the age of **18** and has any indication of illness/injury not qualifying for implied consent, a legal guardian shall be notified for consent or denial of treatment. If done over the phone, use dispatch to make the call. If guardian cannot come to the scene, confirm relationship to the patient then proceed with verbal consent/refusal.

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Basic Standards of Patient Management

Purpose: To establish basic standards for pre-hospital care of ill and injured persons.

Procedure:

- I. Airway Management
 - A. Open promptly with technique appropriate to situation.
 - B. Patient positioning should protect airway from aspiration of vomitus or other foreign matter.
 - C. Administer oxygen (per patient condition).
 - D. Monitor adequacy of oxygenation during therapy.
 - E. Monitor adequacy of ventilation during therapy.
 - F. Choose effective adjunctive equipment to assist ventilation.
 - G. Intubate patient in cases of apnea, comatose, or signs and symptoms of respiratory insufficiency.
 - H. Suction as needed for patient support.
 1. Connect apparatus properly.
 2. Suction posterior pharynx only.
 3. Suction no more than 15 seconds or until life-threatening obstruction is cleared.
 4. Insure adequate ventilation and oxygenation between suctioning attempts.
- II. Bandaging
 - A. Choose technique which is simple and quick to apply.
 - B. Keep dressing sterile while applying.
 - C. Moisten dressing for an evisceration.
 - D. Secure dressing with bandage which is snug but does not impair circulation.
- III. Splinting
 - A. Extremities
 1. Check pulse and sensation distally prior to movement.
 2. Identify and dress open wounds prior to splinting.
 3. Avoid sudden or unnecessary movement of fracture site to minimize pain and soft tissue damage.
 4. Severely angulated mid-shaft fractures may be straightened by gentle, continuous traction if necessary for immobilization, extrication, or transport. Try one time only and if severe pain, crepitus, or rigidity appear, then splint in the position found.

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5. Joint injuries should be immobilized in the position which they are found.
 6. With open fractures, retraction of bone ends is not desired, but may be required for secure immobilization.
 7. Maintain gentle, continuous, axial traction and support during splinting.
 8. Pad splinting to prevent pressure points.
 9. Immobilize joints above and below the fracture site if bone, and the bones above and below if joint.
 10. Splint should not compromise circulation but should be secure enough to prevent movement during transport.
 11. Check pulses and sensation following splint application and during transport.
- B. Traction Splinting
1. Follow principles of extremity splinting.
 2. Measure splint length prior to application.
 3. Position ischial pad appropriately (empty pockets if needed).
 4. Secure groin strap first, pad if needed.
 5. Maintain continuous traction and support throughout the splinting procedure.
 6. Position the straps on the leg.
 7. Secure the ankle hitch.
 8. Titrate the amount of traction to patient comfort.
 9. Secure leg straps.
 10. Check distal pulses, circulation and sensation before and after application and during transport.
 11. Traction splint should only be used on mid-shaft closed femur fractures unless told otherwise by the emergency department physician.
- IV. Spinal Immobilization
- A. Cervical
1. Apply following primary assessment if indicated.
 2. Use two persons in application if at all possible.
 3. Apply gentle continuous traction in neutral axis of spine. ***Do not use force to straighten.***
 4. Obtain secure immobilization by choice of equipment.
 5. Advise patient of procedure and purpose before and during application.
 6. Use towel rolls and tape if CID is not available.
 7. Instruct bystander or assistants for continued monitoring of airway and effectiveness of immobilization.

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- B. Spinal
 1. Compete secondary survey and splint fractures prior to movement of patient, when possible.
 2. Document neurological findings.
 3. Choose equipment to minimize patient movement.
 4. Roll patient as a unit onto immobilization device, as per protocol.
 5. Apply gentle, continuous, axial traction during movement.
 6. Use straps and tape to secure patient effectively and allow turning as a unit for airway control.
 7. Re-check neurological status after movement and as transporting.
 8. Instruct assistants for continued monitoring of airway and effectiveness of immobilization.

- V. General principles include, when appropriate:
 - A. Correct airway and oxygenation problems.
 - B. Recognize and respond promptly to emergent difficulties.
 - C. Position patient with legs elevated for hypovolemia and neurogenic shock (unless contraindicated), head elevated for respiratory distress, position of comfort otherwise.
 - D. Recognize and manage types of shock.
 - E. Continue monitoring patient status.
 - F. Communicate appropriately and effectively with patient.
 - G. Anticipate unstable conditions requiring immediate transport.

- VI. Trauma Management (priority of injuries)
 - A. Correct airway and oxygenation problems.
 - B. Recognize and respond promptly to emergent difficulties.
 - C. Recognize and treat types of shock.
 - D. Immobilize cervical spine following primary survey if appropriate.
 - E. Perform complete secondary survey prior to treatment.
 - F. Dress wounds.
 - G. Immobilize and splint possible fractures prior to movement unless there is an urgent reason to remove patient rapidly from a dangerous situation.
 - H. Manage more serious injuries before less serious ones (unless logistical reason for re-ordering priorities).
 - I. Anticipate unstable conditions requiring immediate transport.

- VII. Patient Movement
 - A. Do primary and secondary assessment prior to patient movement (unless grave threat to patient).

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- B. Monitor airway and cervical spine carefully while moving patient.
- C. Roll patient as a unit.
- D. Splint prior to movement, if possible.
- E. Perform a smooth and safe transfer to transport device (board or vehicle).
- F. Use proper body mechanics as a rescuer.
- G. Minimize patient movement with modifications for environmental hazards.

VIII. Triage

- A. Size up the scene and call for assistance if needed, notify hospital.
- B. Assign one medical person to control medical scene (usually first paramedic on scene or director of service).
- C. Complete primary survey on all patients before management.
- D. Categorize patients according to priority and assign personnel to complete assessment and treatment on that basis.
(Refer to appropriate triage protocol)

IX. Extrication

- A. Survey and secure scene, determine number of patients, need for specialized equipment and or personnel.
- B. Call for backup if needed (medical/technical).
- C. Protect rescuers first; e.g., treat gas spills, remove downed power lines, etc.
- D. Stabilize vehicle prior to entry.
- E. Perform primary survey and treat airway difficulties, severe bleeding first.
- F. If patient has no pulse or respirations and extrication is necessary before CPR can be initiated, patient should be considered unsalvageable.
- G. Triage patients and assign to available medical personnel.
- H. Apply cervical collar.
- I. Perform quick secondary survey as possible; splint extremity fractures if possible.
- J. Expedite safe extrication by specialists after management of life threatening problems.
- K. Perform repeat of complete secondary survey once patient is extricated.

X. Teamwork

- A. The paramedic in charge should lead, i.e., coordinate and manage the scene.
- B. All personnel should follow the directions of the leader.
- C. Team should communicate, avoid duplication or overlap, and share information.
- D. Assistants should anticipate management needs.

Effective 07-01-2016
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XI. Analgesics

- A. Follow specific protocols for analgesic use. In case of allergies, the use of alternate analgesics is approved. ie, a patient allergic to **morphine sulfate** could receive **Demerol** or **Stadol** as an alternative.
- B. There are instances when the administration of Phenergan in conjunction with an analgesic would be warranted and is recommended. i.e., 25 mg of **Demerol** and 12.5 **Phenergan** to a pt. with a hip fracture.
- C. Keep in mind, these are examples of usage and not specific treatment regimes.

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Guidelines Regarding Resuscitation

Each EMS system, in conjunction with the various components of the medical community (medical director, area physicians, home health care professionals) must formulate its own set of guidelines regarding the resuscitation of patients in the field. Guidelines should be established for the decisions of when not to initiate resuscitation and when, or if, to terminate resuscitation in the field. The philosophies, attitudes, and beliefs of the health care providers involved should be combined with the current available medical literature to determine an acceptable set of general guidelines to be used in making such decisions. As always, these guidelines must be designed in such a fashion as to include the wishes of the patient and his/her family in making such decisions - now frequently in the form of "living wills" and "do not resuscitate orders."

The following guidelines are presently used in the Bowie Fire Department EMS system:

- 1. Resuscitation need not be attempted in the field in cases of:**
 - Visual evidence of massive trauma to the brain or heart that is conclusively incompatible with life.
 - Decapitation.
 - Profound dependent lividity.
 - Rigor mortis without associated profound hypothermia.
 - Decomposition of the body.
 - Complete incineration associated with no signs of life.
 - Patients who have already been pronounced dead by either the authorized medical examiner, his duly appointed representative that has been legally authorized to perform this function, or by the patient's physician who is licensed to practice medicine.

2. "Do not resuscitate orders" and "living wills" that have been properly executed according to the laws set forth dealing with such matters can only be recognized if they have been previously registered with the EMS coordinator of the fire department and the EMS medical director, preferably via the patient's attending physician. It should be noted that these orders can be rescinded at any time and that the initiation of a call to the city's emergency medical services system may represent such a rescission. This may need to be determined upon arrival at the scene if possible.

3. With the exceptions outlined in "1 and 2" above, personnel of the Bowie Fire Department EMS system should initiate CPR at either a basic or advanced life support level when it has been determined that the patient has no pulse or spontaneous respirations.

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4. In any situation in which there is a possibility that life exists, every effort should be made to resuscitate the patient unless the conditions outlined in "1 and/or 2" above are met.
5. Once CPR has been initiated, it is to be continued until one of the following occurs:
 - a. Effective spontaneous circulation and ventilation are restored.
 - b. Resuscitation efforts are transferred to other individuals of at least equal skill, training, and experience.
 - c. The on-line base station physician determines that further resuscitative efforts will be futile and gives a verbal order to terminate CPR.
 - d. The rescuers are exhausted and physically unable to continue the resuscitation.
6. In those cases in which the patient's status is unclear and the appropriateness of CPR is uncertain, the paramedics should contact the base station physician **after the initiation of CPR.**
7. Out Of Hospital Do Not Resuscitate Orders.
 - a. OOH DNR forms, as approved by the Texas Department of Health, are the only recognized DNR forms that the City of Bowie Fire Department shall recognize. The form may be the original or a photo static copy. The form must be properly filled out.
 - b. A bracelet or necklace, as approved by the Texas Department of Health, shall be evidence of compliance with the law as it pertains to an OOH DNR.
 - c. All rules pertaining to OOH DNR, as published by the Texas Department of State Health Services, shall be followed.
8. CPR Termination in the Field

EMS DIRECT
940-626-1246

ED DIRECT
940-626-1249

A. TERMINATION OF RESUSCITATION (Medical and Traumatic)

IF ANY DOUBT EXISTS, INITIATE RESUSCITATION AND TRANSPORT

1. PURPOSE

This protocol is designed to guide the provider in determining a futile resuscitation and managing the patient after this determination.

2. PROCEDURE

(a) Exclusions to this protocol.

- (1) If arrest is believed to be secondary to hypothermia or submersion, treat according to appropriate protocol and transport to the nearest appropriate facility.
- (2) If patient is pregnant, treat according to appropriate protocol and transport to the nearest appropriate facility.
- (3) If patient has not reached their 18th birthday, treat according to appropriate protocol and transport to the nearest appropriate facility.

b) Medical Arrest

- (1) EMS providers may terminate resuscitation without medical consult when all three criteria are met.
 - a. The arrest was not witnessed by an EMS provider (and patient is unresponsive, pulseless, and apneic). **AND**
 - b. There is no shockable rhythm identified by an AED or there is asystole or PEA on a manual cardiac monitor. **AND**
 - c. There is no return of spontaneous circulation (ROSC) prior to decision to terminate resuscitation despite appropriate field EMS treatment that includes **15 minutes** of minimally-interrupted EMS CPR. **OR**
- (2) EMS providers may terminate resuscitation with medical consult when there is no ROSC prior to decision to terminate resuscitation despite appropriate field EMS treatment that includes 15 minutes of minimally-interrupted CPR in the presence of an arrest witnessed by an EMS provider or the presence of a shockable rhythm.

c) Trauma Arrest

- (1) EMS providers may terminate resuscitation without medical consult when both criteria are met. (If medical etiology is suspected, use

"Medical Arrest' above.)

- a. There are no signs of life. **AND**
 - b. The patient is in asystole **OR**
- (2) EMS providers may terminate resuscitation with medical consult when both criteria are met in either blunt or penetrating trauma.
- a. **Blunt**
 - i. There are no signs of life. **AND**
 - ii. The patient is in a rhythm other than asystole and there is no ROSC despite 15 minutes of appropriate treatment which includes 15 minutes minimally-interrupted CPR.
 - b. **Penetrating**
 - i. There are no signs of life. **AND**
 - ii. The patient is in a rhythm other than asystole and there is no ROSC. If less than 15 minutes from a trauma center, transport the patient. If transport time exceeds 15 minutes, consult.

THERE ARE SOME CAUSES OF TRAUMATIC CARDIOPULMONARY ARREST (I.E. PENETRATING TRAUMA) THAT MAY BE REVERSED IF APPROPRIATELY AND EMERGENTLY MANAGED. THEREFORE, EMS PROVIDERS SHOULD FOLLOW APPROPRIATE PROTOCOLS FOR TRAUMATIC ARREST INCLUDING APPROPRIATE AIRWAY MANAGEMENT AND CONSIDERATION FOR BILATERAL NEEDLE DECOMPRESSION THORACOSTOMY. HOWEVER, EVEN WITH THE APPLICATION OF THESE MANEUVERS, ASYSTOLE AND PULSELESSNESS FOR GREATER THAN 10 MINUTES ARE INDEPENDENT PREDICTORS OF MORTALITY.

d) Pronouncement of Death in the Field protocol.

- (1) Leave secured tube in place.
- (2) Crimp or tie IV's in place
- (3) Contact PD/SO for DOS protocol.

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Medical Protocols

Initial Medical Care

Quickly assess the situation. Intervene as the patient's condition requires, following the priorities below. If time permits and the situation allows, introduce yourself, try to reassure the patient, and explain what you are about to do. Obtain the history and perform the appropriate physical exam at the appropriate time as dictated by the circumstances of the situation.

1. First Priority

Establish and/or maintain an airway as needed. This may require no more than loosening any tight clothing for the awake, alert patient in no respiratory distress; or something more advanced, such as intubation in the non-breathing patient.

2. Second Priority

Assessment

- a) Expose chest as required.
- b) Note rate, depth, and pattern of respiration.
- c) Auscultate breath sounds.

Management

- a) Administer oxygen, as required, by nasal cannula at 2-6 liters/min, by simple mask at 6-10 liters/min, by non-rebreather at 10-15 liters/min, or by bag at > 10 liters/min.
- b) Assist or deliver ventilations as necessary.
- c) Intubate if necessary.

3. Third Priority

Palpate for a pulse.

If pulse present, obtain a blood pressure.

If no pulse or blood pressure present and patient is unconscious, then begin CPR.

Evaluate cardiac rhythm by cardiac monitor if applicable to situation, and refer to appropriate protocol as required.

3. For Cardiac Arrest follow CAB guidelines set forth by AHA.

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Bowie, Texas 76230

4. Fourth Priority

If patient is considered to be an unstable or **potentially** unstable patient, then start IV with NS at TKO rate (30-60 microdrops/min or 10-15 macrodrops/min) unless otherwise specified.

5. Fifth Priority

Complete assessment of situation.
Finish obtaining history, vital signs, and physical exam findings if not already done.

6. Sixth Priority

Initiate transport of patient in a manner consistent with the transportation protocol.
Transmit information to medical control per radio report protocol.
Await further orders from medical control as required.

Notes:

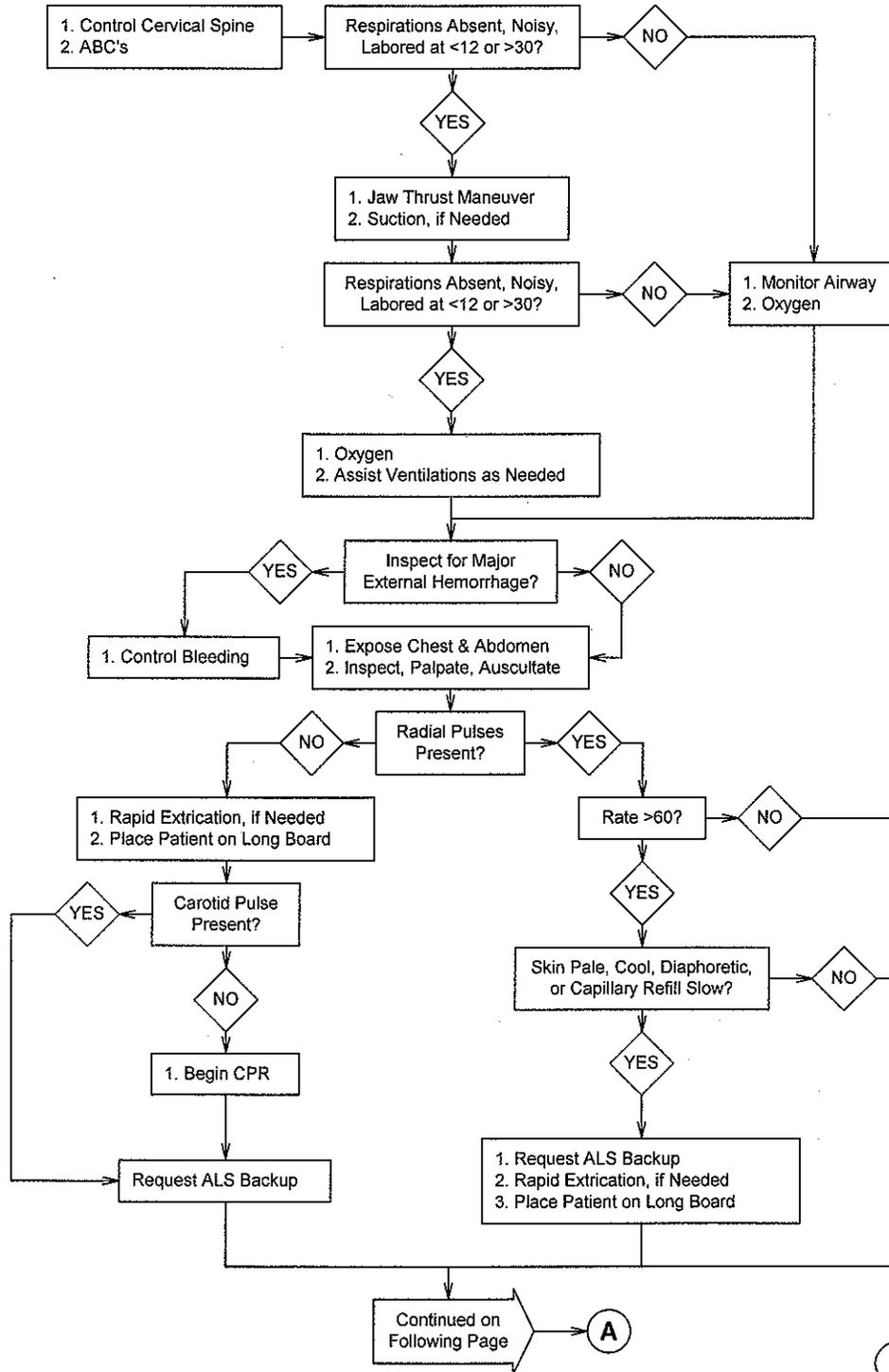
1. After initial assessment of patient, continue to monitor patient's status and note any significant changes. Vital signs should be repeated at least every 5 minutes in potentially unstable patients and continually monitored in those patients who are unstable. Report any significant changes in patient's status or vital signs to the base station hospital.
2. Awake, alert patients should be allowed to assume a position of comfort during transport as long as it does not interfere with the appropriate delivery of care.
3. When treating cardiac patients follow ACLS guidelines regarding the use of Sodium Bicarbonate for Metabolic Acidosis. 1 -1.5 mEq per kilogram initially followed by 0.5 mEq per kilogram every 10 minutes thereafter.

BOWIE FIRE DEPARTMENT
EMS DIVISION

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Expires 07-31-2018

MAJOR TRAUMA

First Responder
EMT

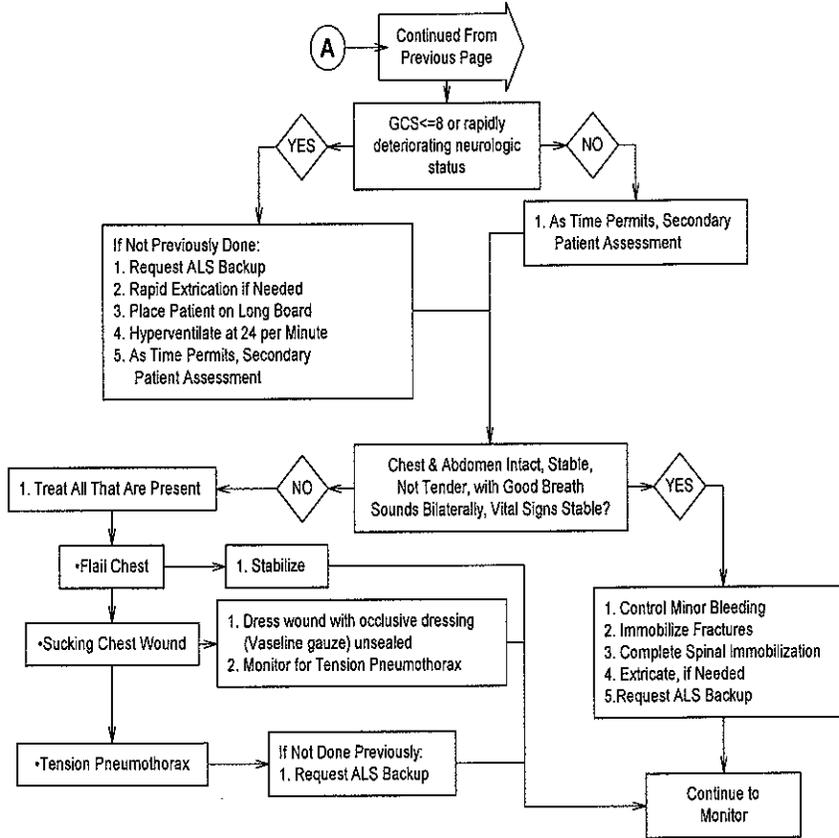


Medical Director: S.S. Aujla MD 1010 N. Mill Bowie, Texas 76230

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MAJOR TRAUMA (Cont.)

First Responder
EMT



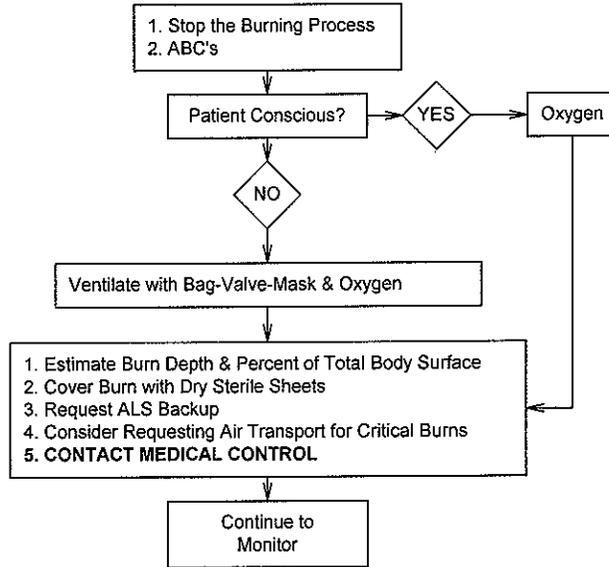
• Time on scene with Trauma patients should not exceed 10 minutes unless extrication is required.
If time on scene exceeds 10 minutes, reasons for delay should be documented.
• If extrication >15 minutes is required or if time to definitive care is likely to exceed 25 minutes, consider air transport.

**BOWIE FIRE DEPARTMENT
EMS DIVISION**

Effective 07-01-2016
Expires 07-31-2018

BURNS (Moderate to Critical)

**First Responder
EMT**



Rapid estimates of TBSA Burn:

1. "Rule of Nines"
or
2. Adult Palm Area = 1% TBSA Burn

CRITICAL BURNS

1. Inhalation Injuries
2. All Burns of Face, Feet, Hands, Genitalia
3. Adult: 2° >25% TBSA
Child: 2° >20% TBSA
4. 3° >10% TBSA
5. All Electrical Burns
6. All Burns with Associated Trauma (Fractures, etc.)
7. All Burns in Patients <11 Years Old or >50 Years Old
8. Patients with Serious Underlying Medical Disease

MODERATE BURNS

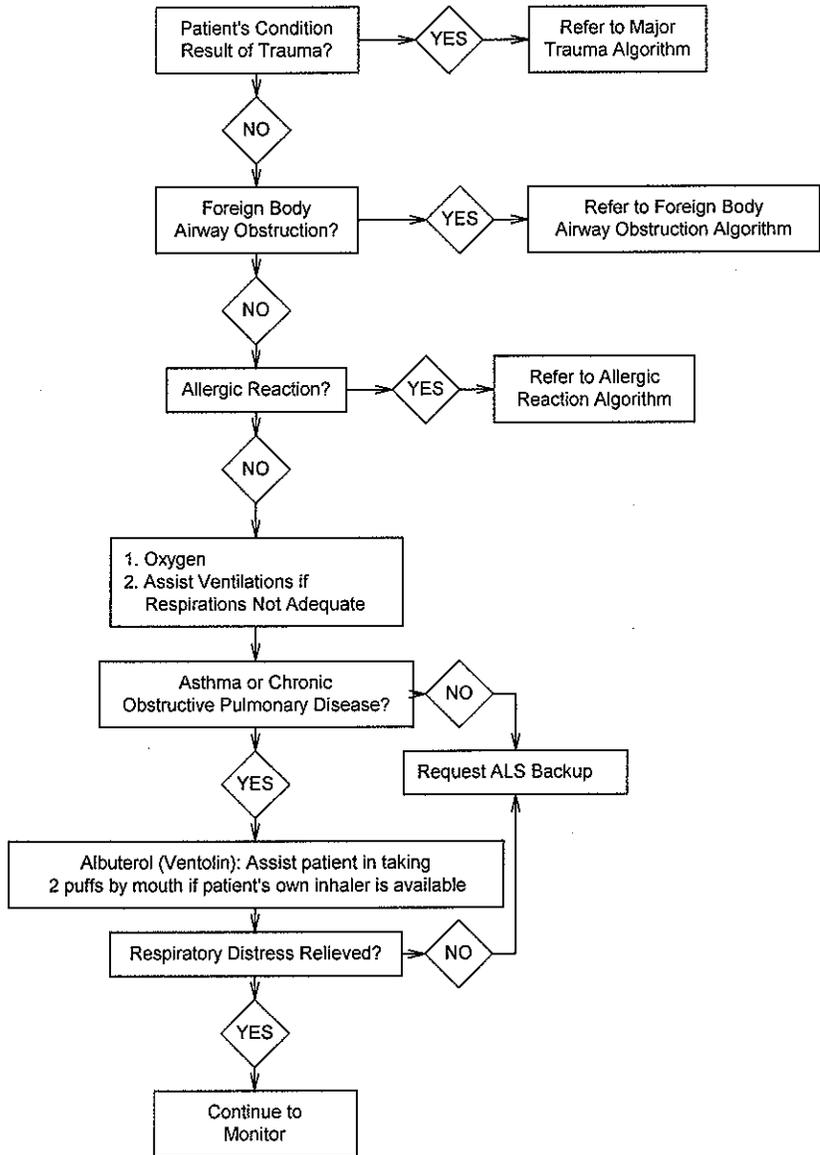
1. Adult: 2° 15-25% TBSA
Child: 2° 10-20% TBSA
2. 3° 2-10% TBSA

BOWIE FIRE DEPARTMENT
EMS DIVISION

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RESPIRATORY DISTRESS (Non-Traumatic)

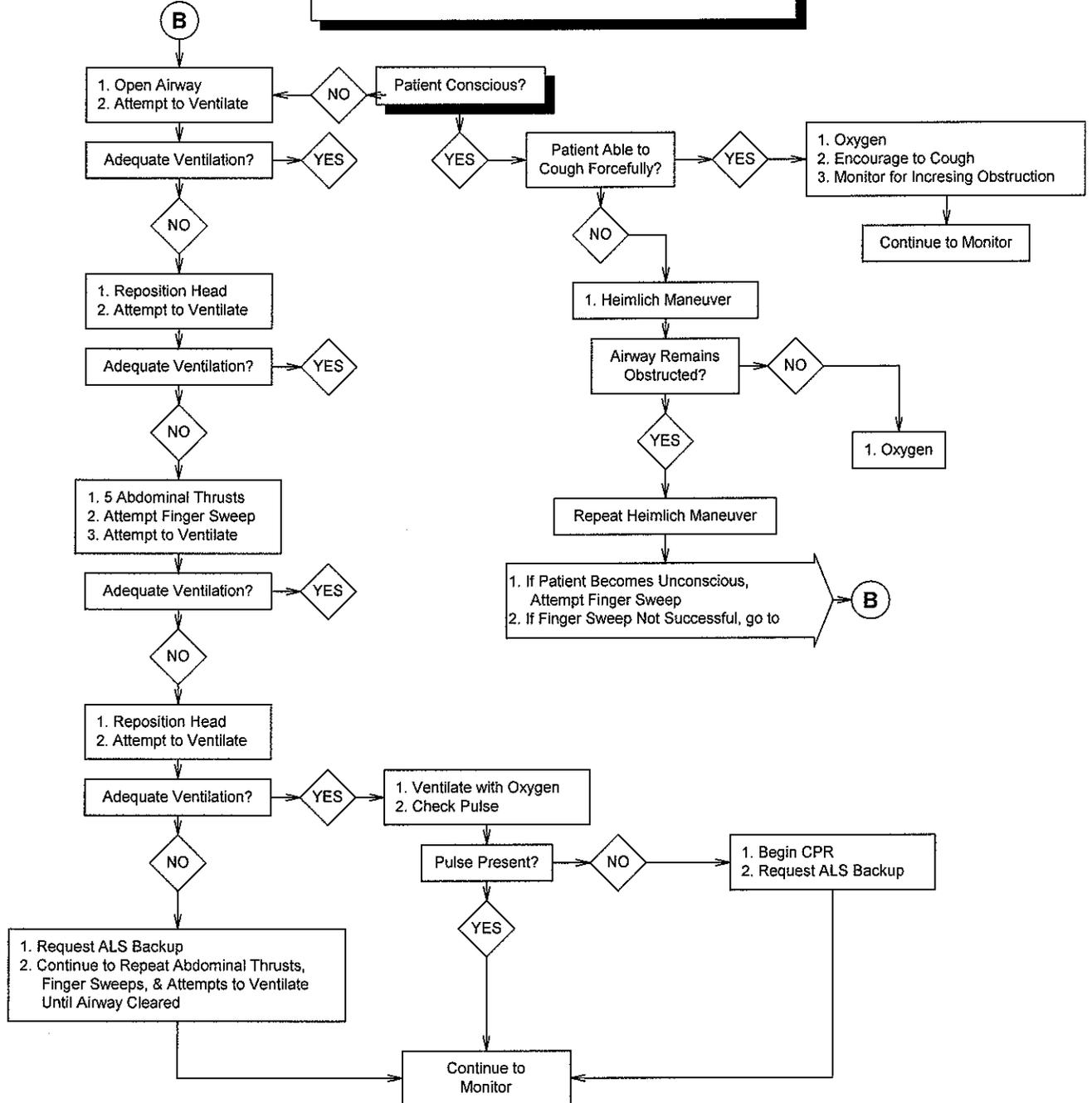
First Responder
EMT



FOREIGN BODY AIRWAY OBSTRUCTION

First Responder
EMT

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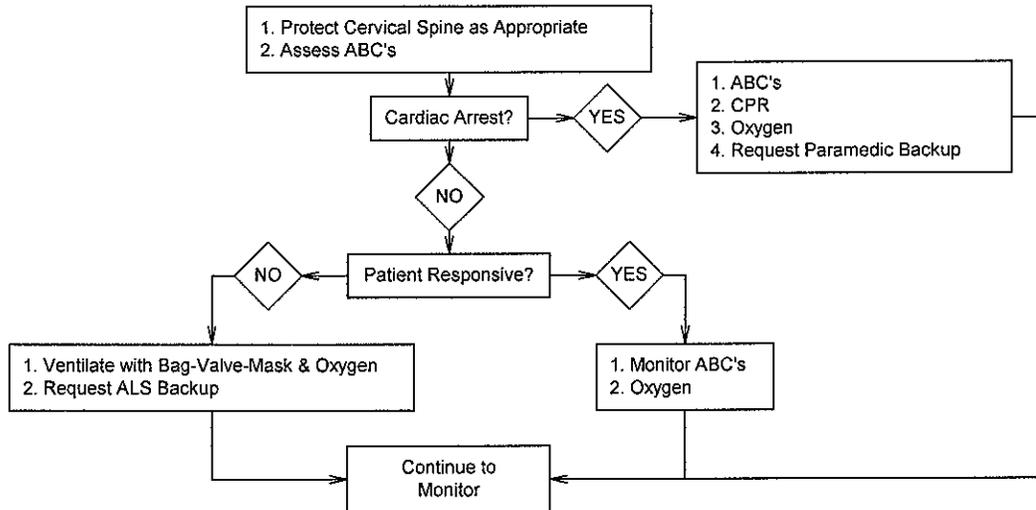


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EMS DIVISION

Effective 07-01-2016
Expires 07-31-2018

NEAR DROWNING

First Responder
EMT



• Consider spinal cord trauma, air embolism, hypothermia, alcohol or drug ingestion, hypoglycemia, seizures and myocardial infarction as accompanying problems or underlying causes.

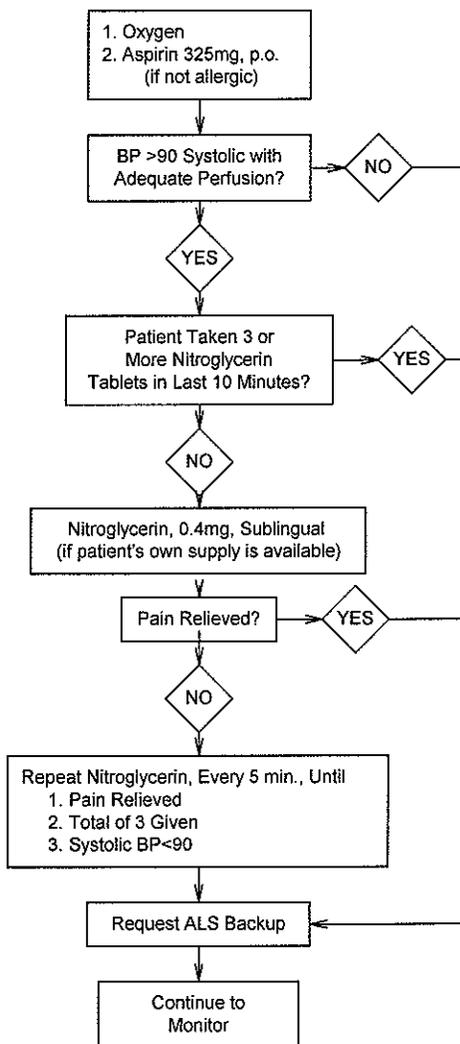
• All near drowning patients, no matter how mild the episode appears to be, should be transported for observation & evaluation.

BOWIE FIRE DEPARTMENT
EMS DIVISION

Effective 07-01-2016
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**CARDIAC CHEST PAIN
or SUSPECTED
MYOCARDIAL INFARCTION**

First Responder
EMT

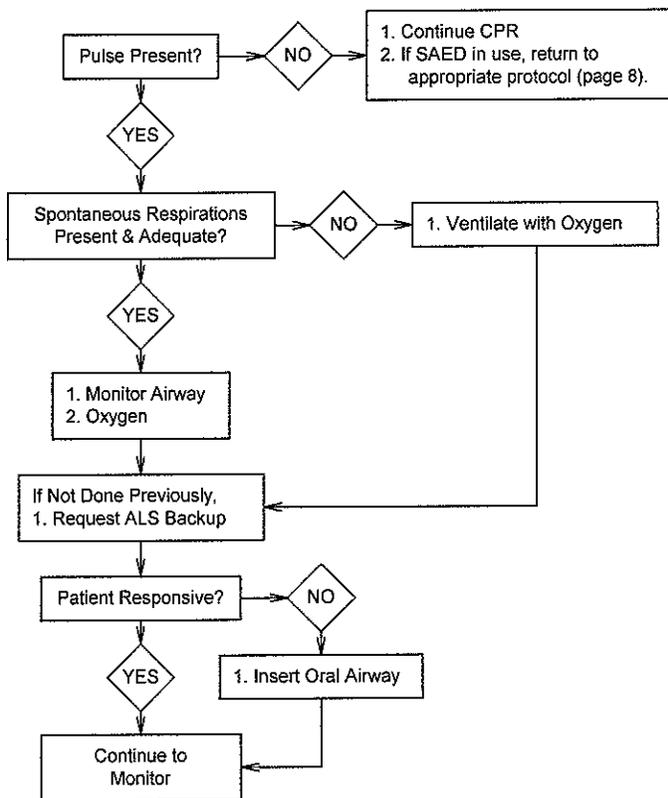


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EMS DIVISION

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POST RESUSCITATION MANAGEMENT

First Responder
EMT

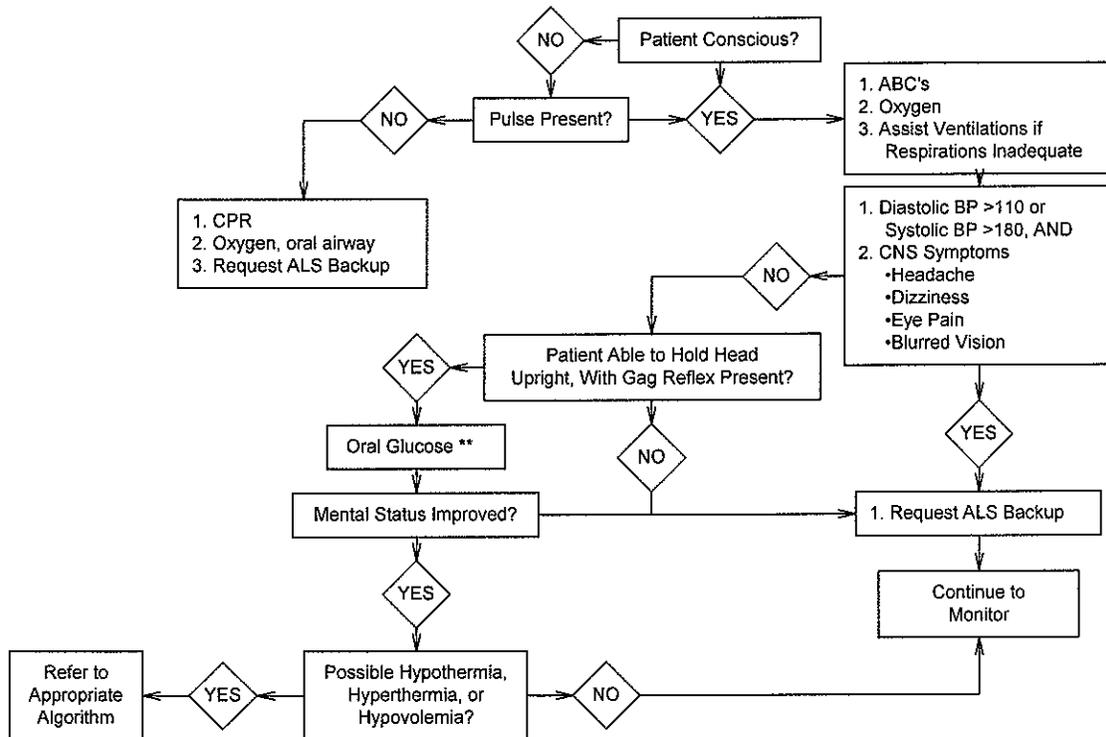


BOWIE FIRE DEPARTMENT
EMS DIVISION

First Responder
EMT

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Expires 07-31-2018

DECREASED LEVEL OF
CONSCIOUSNESS or
NEUROLOGIC SYMPTOMS*
(NON-TRAUMATIC)



***NEUROLOGIC SYMPTOMS**
1. Any Motor or Sensory Deficit
2. Any Altered Level of Consciousness

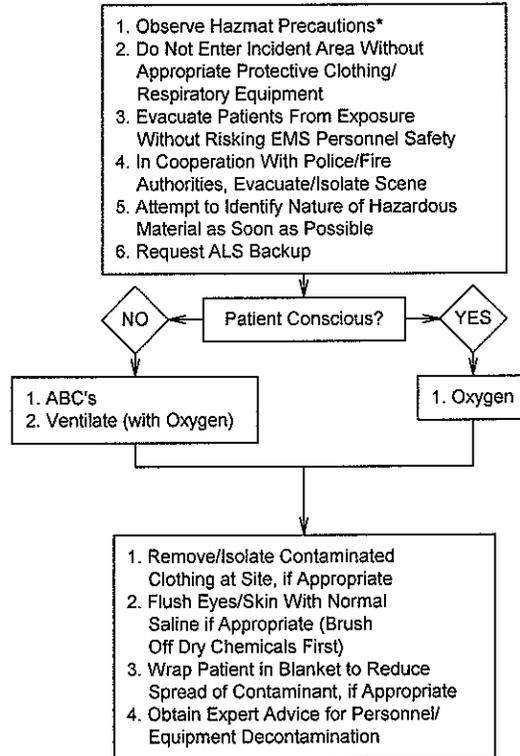
** EMT-Basics with appropriate training
may use glucometers to obtain baseline
blood glucose before giving oral glucose.

BOWIE FIRE DEPARTMENT
EMS DIVISION

Effective 07-01-2016
Expires 07-31-2018

**HAZARDOUS/TOXIC
MATERIAL EXPOSURE**

**First Responder
EMT**



HAZMAT PRECAUTIONS

1. Assume ALL Chemicals Hazardous Until Proven Otherwise
2. Approach From Upwind
3. Stay Out of Low-Lying Areas; Stay Uphill if Possible
4. Do Not Walk Into or Touch Spilled Chemicals;
Wear Gloves When Touching Contaminated Patients
5. Avoid Smoke, Gasses, Fumes, Vapors
6. Keep Combustibles Away
7. Keep Ignition Sources Away

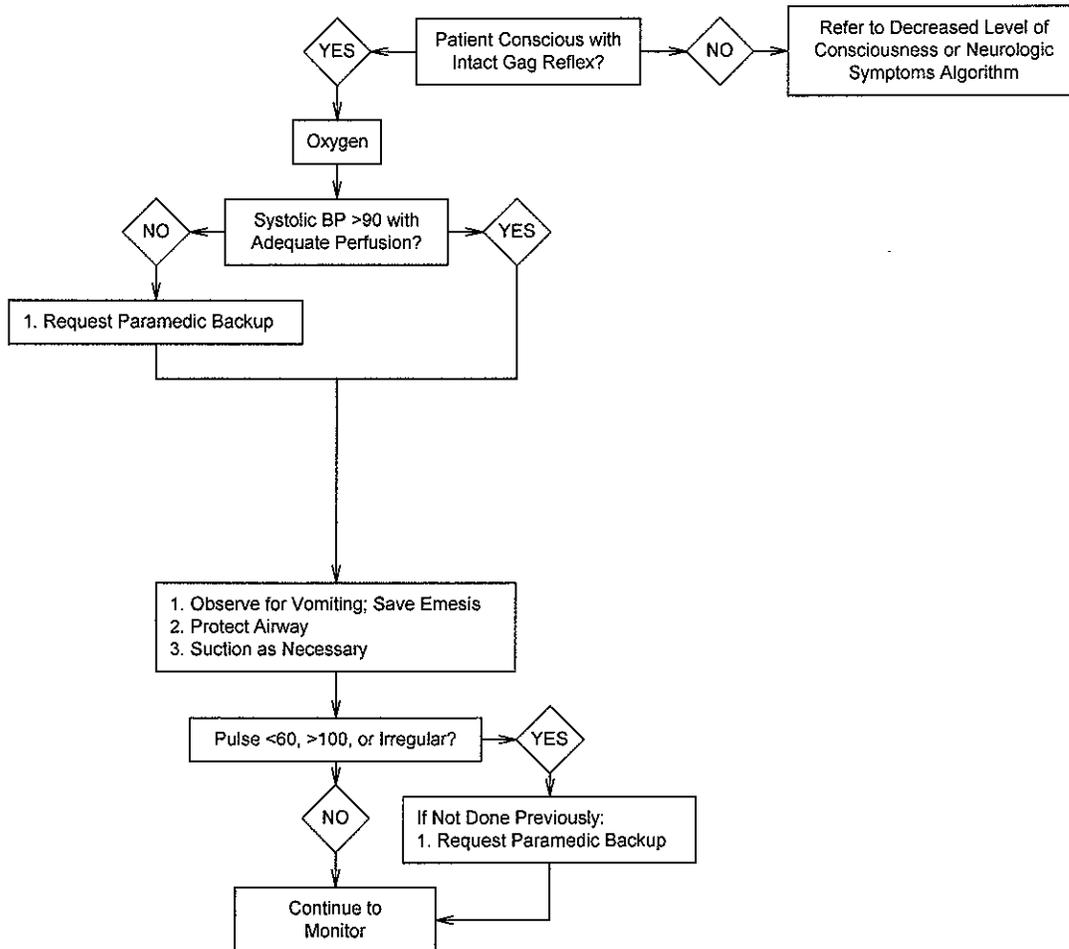
- In Multiple Patient Incidents, Use Triage to Determine Which Patients Receive Immediate Care
- All Patients Should Be Transported for Observation Regardless of how Mild the Episode Seems to be
- Rescue Attempts, Scene Management, & Patient Care Should be Based on Best Information Available about the Material
- Coordinate with Fire Authorities and Regional Hazmat Resources as Available

BOWIE FIRE DEPARTMENT
EMS DIVISION

Effective 07-01-2016
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POISONING/OVERDOSE

First Responder
EMT



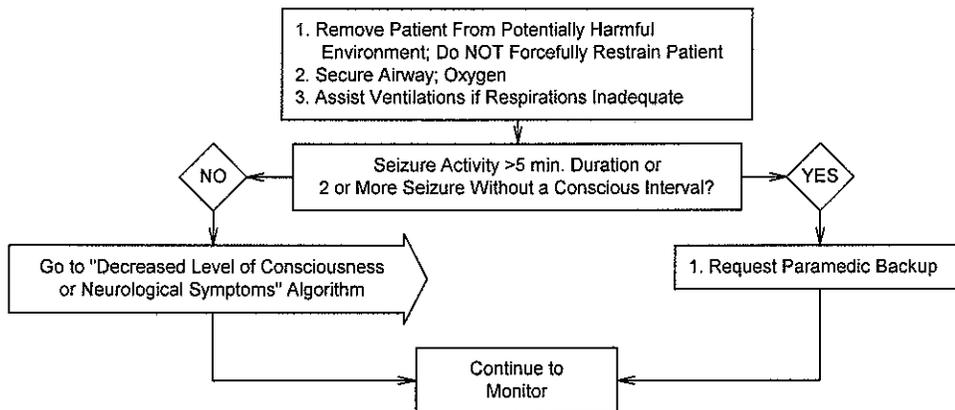
Gather ALL Potential Agent Containers and, if Possible, Samples of Agents for Transport to the Emergency Department With the Patient

BOWIE FIRE DEPARTMENT
EMS DIVISION

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SEIZURES

First Responder
EMT

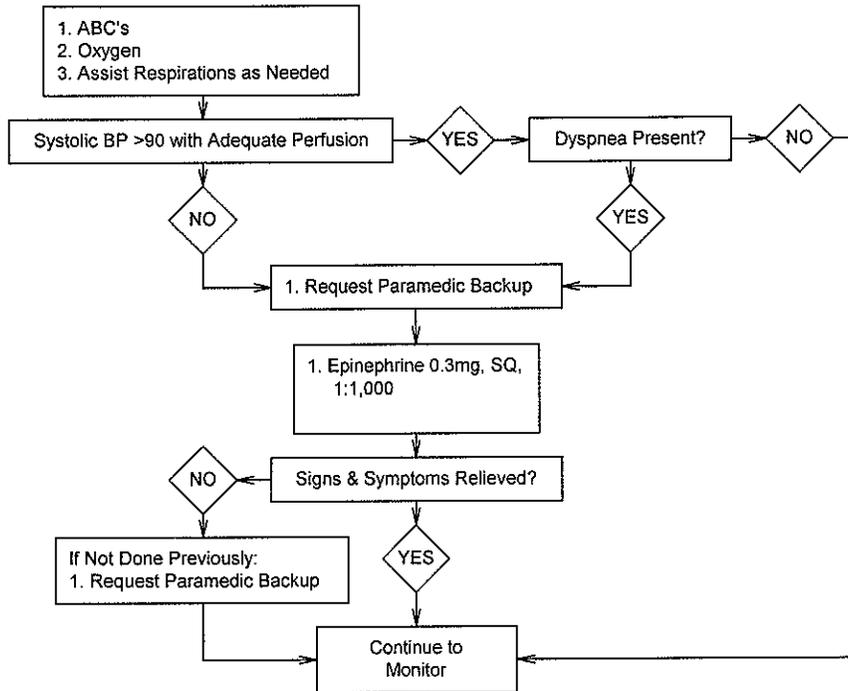


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ALLERGIC REACTION

First Responder
EMT



PEDIATRIC DOSE

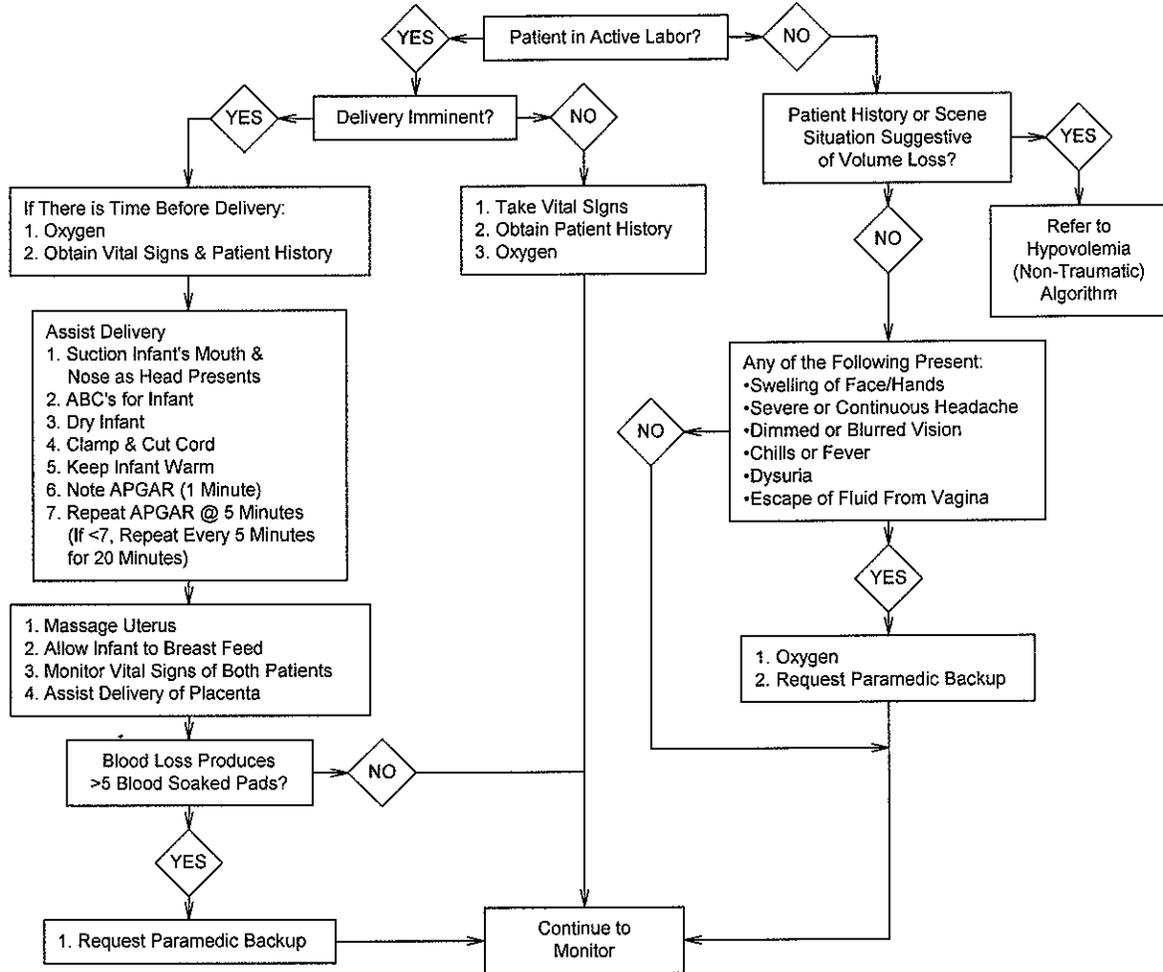
•Epinephrine, 0.15mg, SQ

**BOWIE FIRE DEPARTMENT
EMS DIVISION**

Effective 07-01-2016
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OBSTETRIC EMERGENCY

**First Responder
EMT**



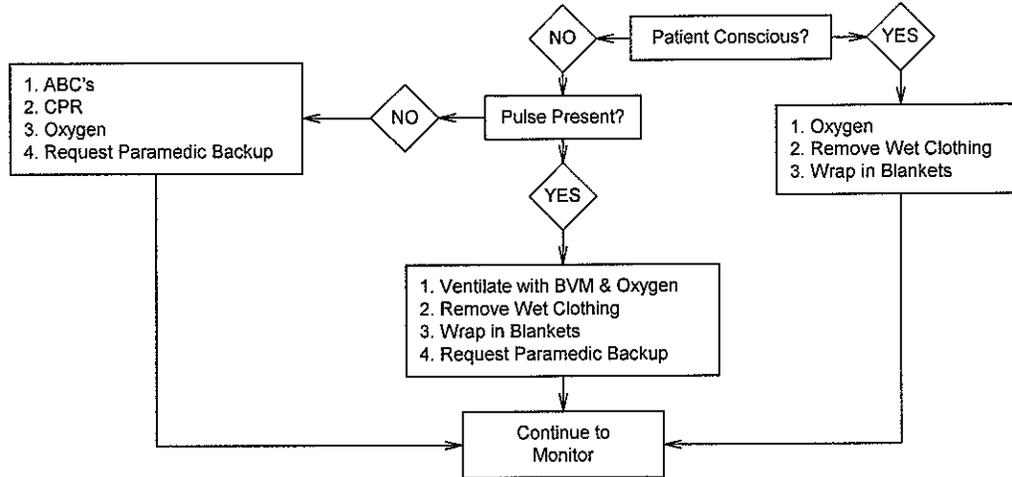
Sign	0 Points	1 Point	2 Points
Appearance	Blue or Pale	Body Pink Extremities Blue	Completely Pink
Pulse Rate	Absent	Below 100	Above 100
Grimace	No Response	Grimaces, or Whimpers	Active Cries
Activity	Absent (Flaccid)	Some Flexion of Extremities	Active Extremity Motion
Respiratory Effort	Absent	Slow and irregular	Strongly Crying

BOWIE FIRE DEPARTMENT
EMS DIVISION

Effective 07-01-2016
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COLD EXPOSURE (SYSTEMIC HYPOTHERMIA)

First Responder
EMT



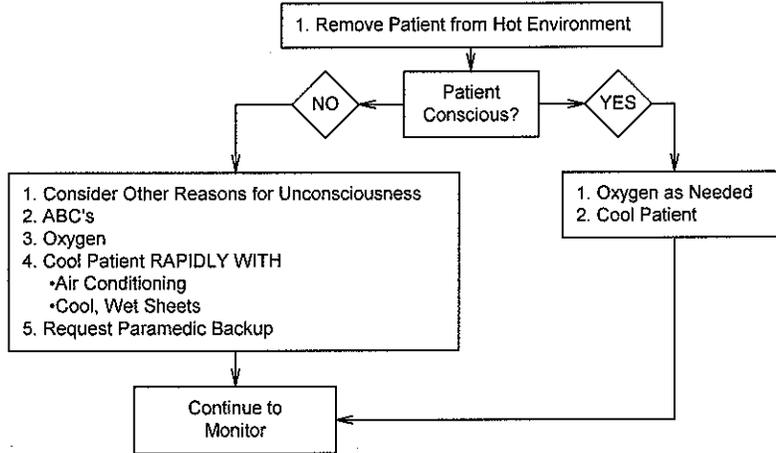
- Suspect Hypothermia in any Patient with An Altered Level of Consciousness in a Cool Environment
- Move ALL Patients Gently, to Avoid Serious Arrhythmias
- Do Not Actively Rewarm Patient in Prehospital Environment
- Avoid Extensive Advanced Life Support in Prehospital Environment

BOWIE FIRE DEPARTMENT
EMS DIVISION

Effective 07-01-2016
Expires 07-31-2018

HEAT EXPOSURE (HEAT STROKE)

First Responder
EMT



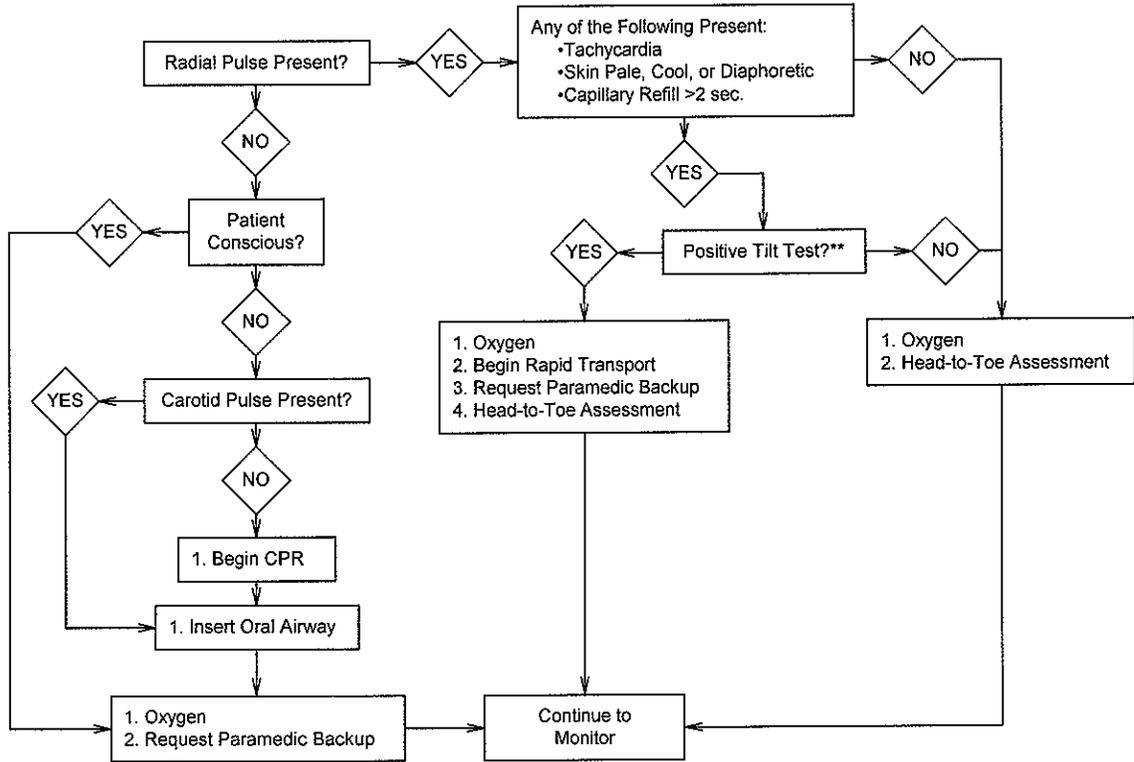
Suspect Heat Stroke in any Patient with an Altered
Level of Consciousness in a Hot Environment

BOWIE FIRE DEPARTMENT
EMS DIVISION

Effective 07-01-2016
Expires 07-31-2018

**HYPOVOLEMIA*
(NON-TRAUMATIC)**

First Responder
EMT



*Includes History of Vomiting, Diarrhea, Bloody or Dark Stool, Abdominal Pain, or Possible Diabetic Hyperglycemic State

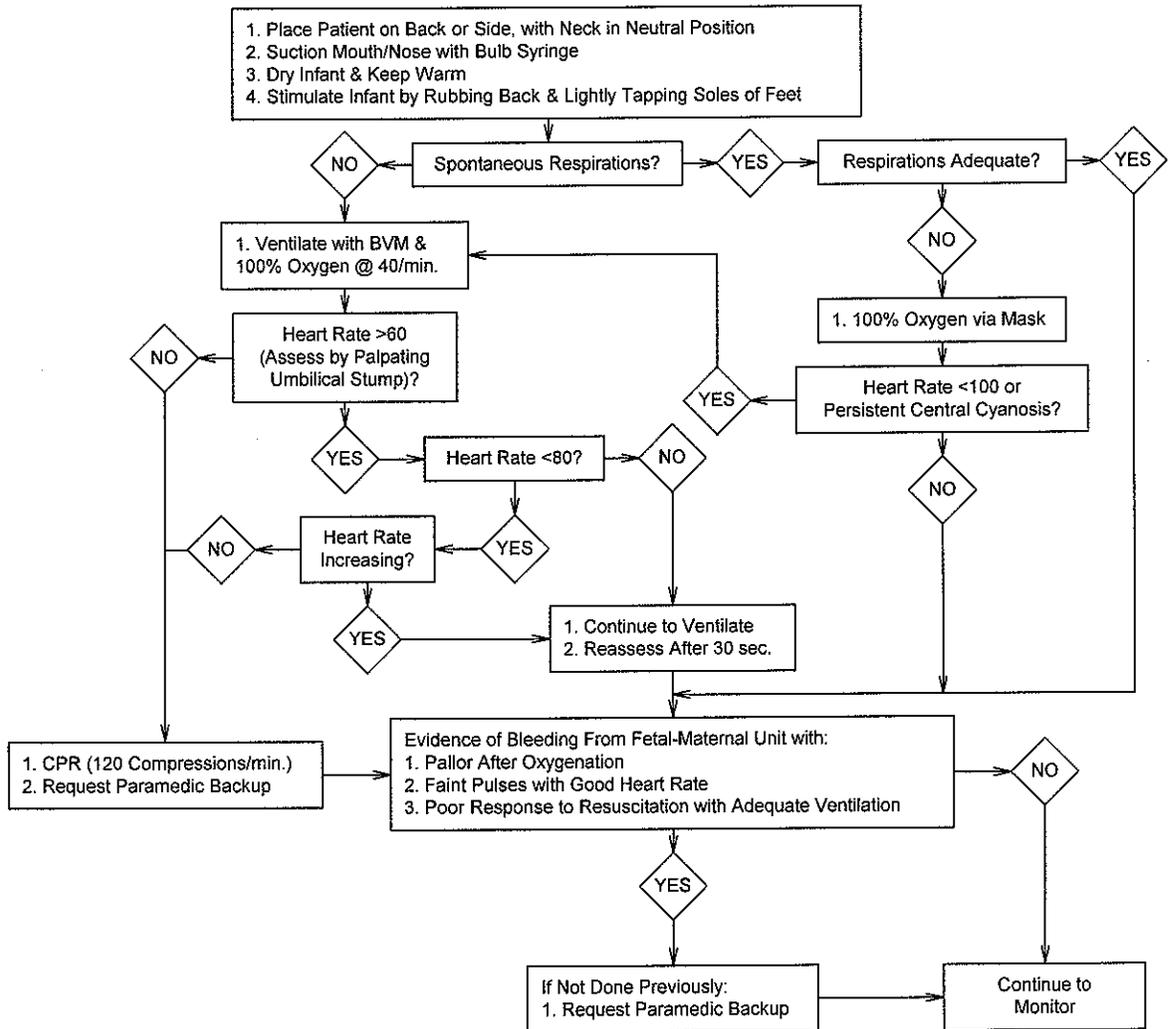
****POSITIVE TILT TEST**
Pulse Rate Increases by 20, Systolic BP Decreases by 20, or Diastolic BP Decreases by 10 when Patient is Raised from Supine to Sitting position OR Patient will Not Tolerate Being Raised From Supine to Sitting Position Because of Weakness, Dizziness, Presyncope, or Syncope.

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EMS DIVISION

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Expires 07-31-2018

NEONATAL RESUSCITATION

**First Responder
EMT**



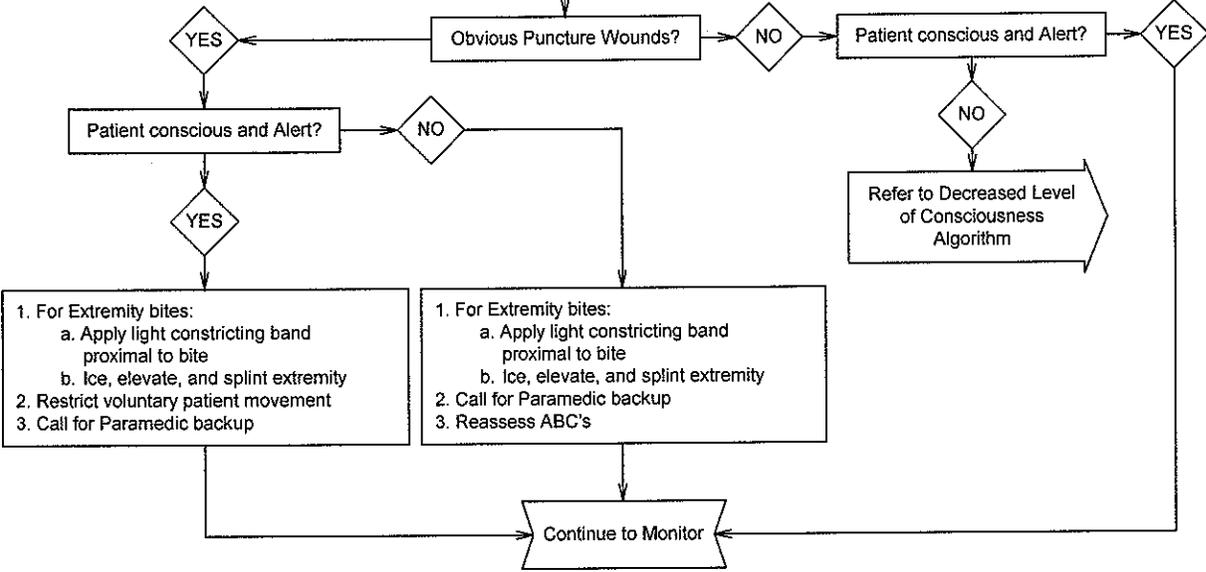
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First Responder
EMT

Snake Bite or Suspected Snake Bite

1. Remove patient from danger. Assume venomous snake until proven otherwise.
2. Assess ABC's
3. Oxygen
4. Do not transport a live snake
5. Do not spend excessive time in search for snake, but bring snake if possible



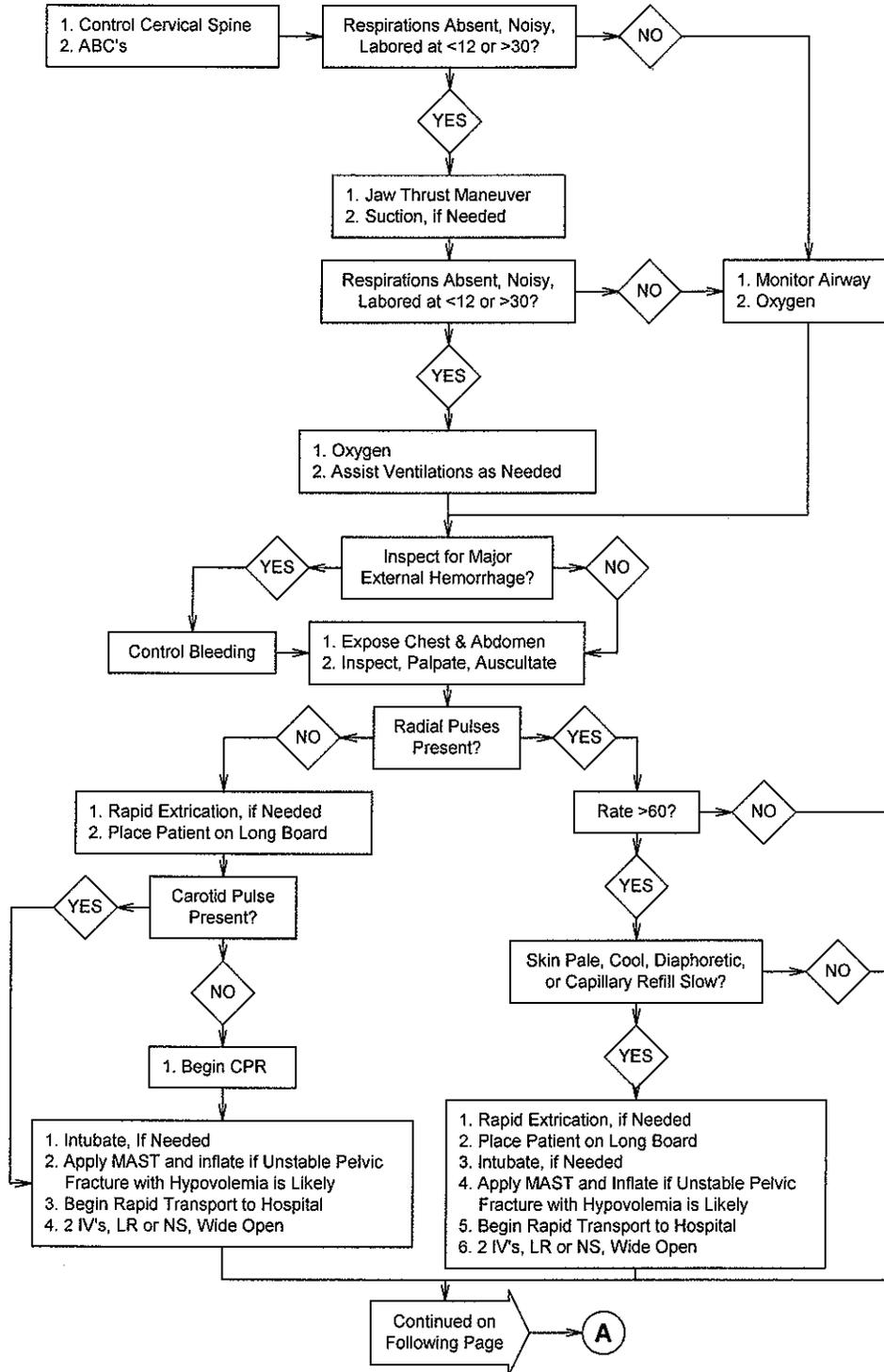
As part of the patient history, determine any allergies to horses or horse serum.
Question regarding previous doses of antivenin

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EMS DIVISION

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MAJOR TRAUMA

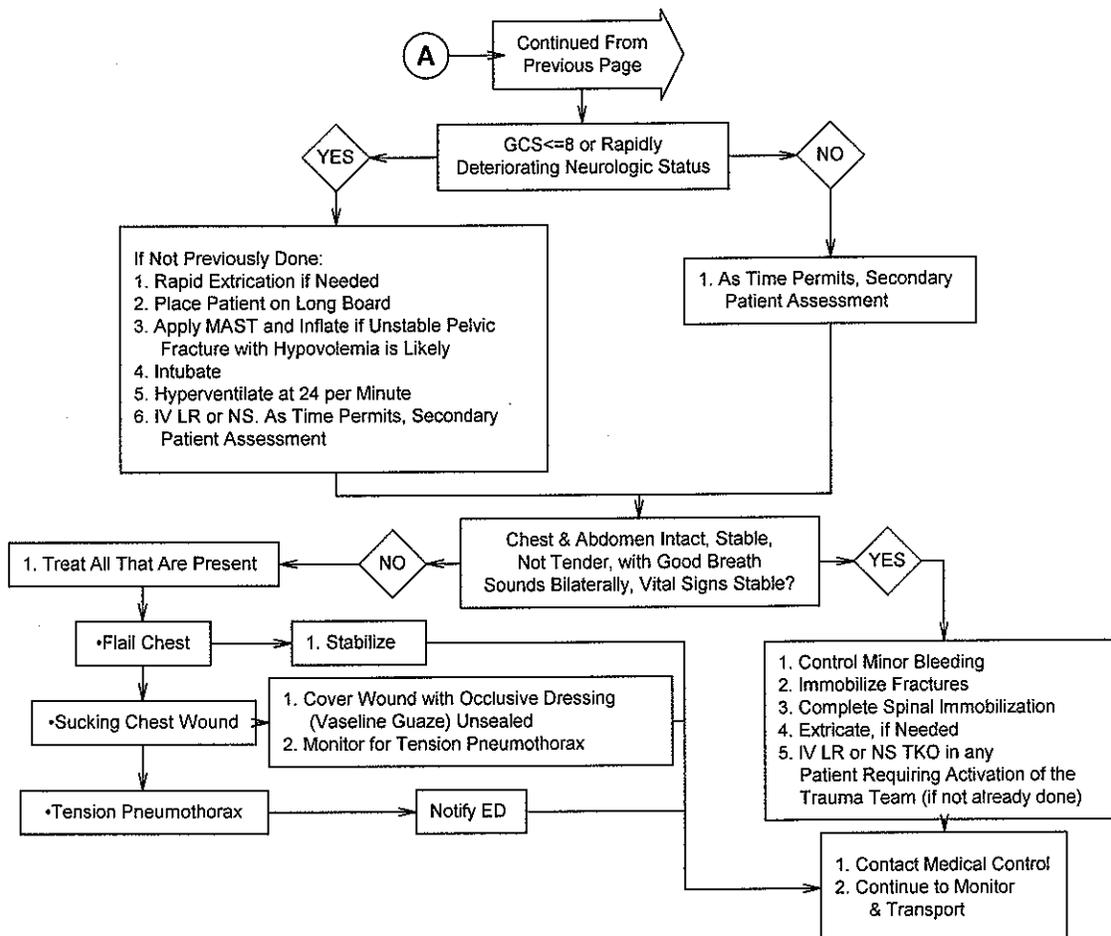
ADVANCED
EMT



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MAJOR TRAUMA (Continued)

ADVANCED
EMT



• Time on scene with Trauma patients should not exceed 10 minutes unless extrication is required. Establish IV's en route to Hospital unless extrication is required.

If time on scene exceeds 10 minutes, reasons for delay should be documented.

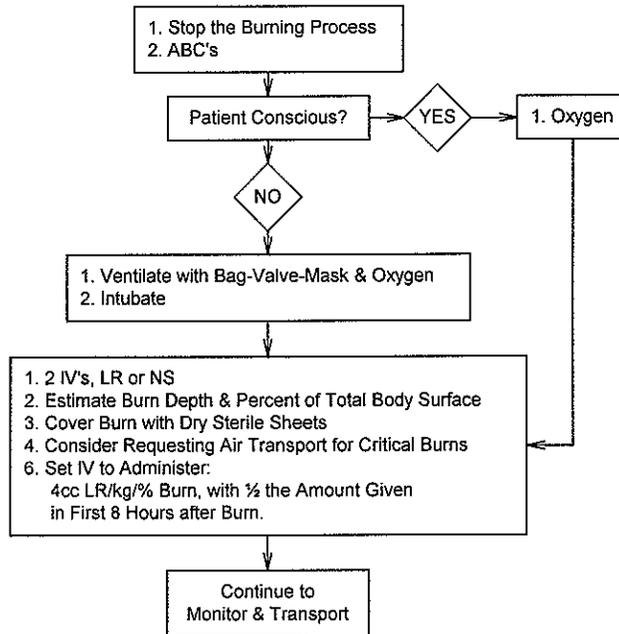
• If extrication >15 minutes is required or if time to definitive care is likely to exceed 25 minutes, consider air transport.

**BOWIE FIRE DEPARTMENT
EMS DIVISION**

Effective 07-01-2016
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BURNS (Moderate to Critical)

**ADVANCED
EMT**



- CRITICAL BURNS**
1. Inhalation Injuries
 2. All Burns of Face, Feet, Hands, Genitalia
 3. Adult: 2° >25% TBSA
Child: 2° >20% TBSA
 4. 3° >10% TBSA
 5. All Electrical Burns
 6. All Burns with Associated Trauma (Fractures, etc.)
 7. All Burns in Patients <11 Years Old or >50 Years Old
 8. Patients with Serious Underlying Medical Disease

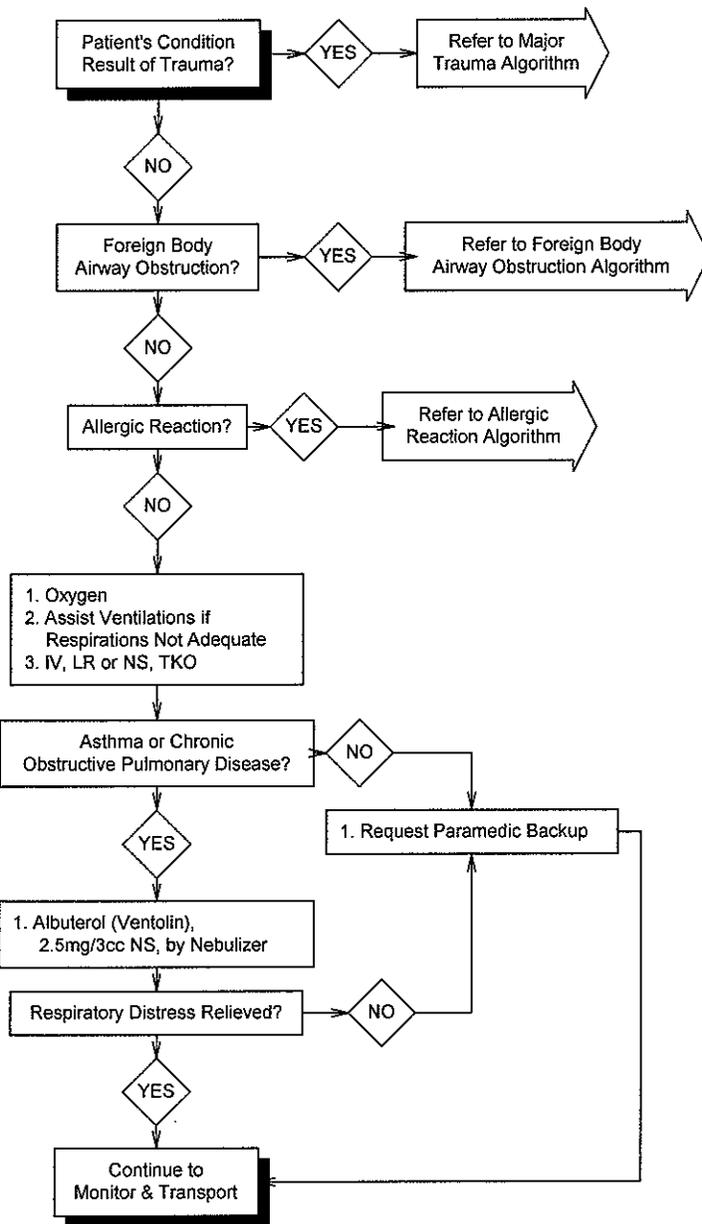
- MODERATE BURNS**
1. Adult: 2° 15-25% TBSA
Child: 2° 10-20% TBSA
 2. 3° 2-10% TBSA

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EMS DIVISION

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RESPIRATORY DISTRESS (Non-Traumatic)

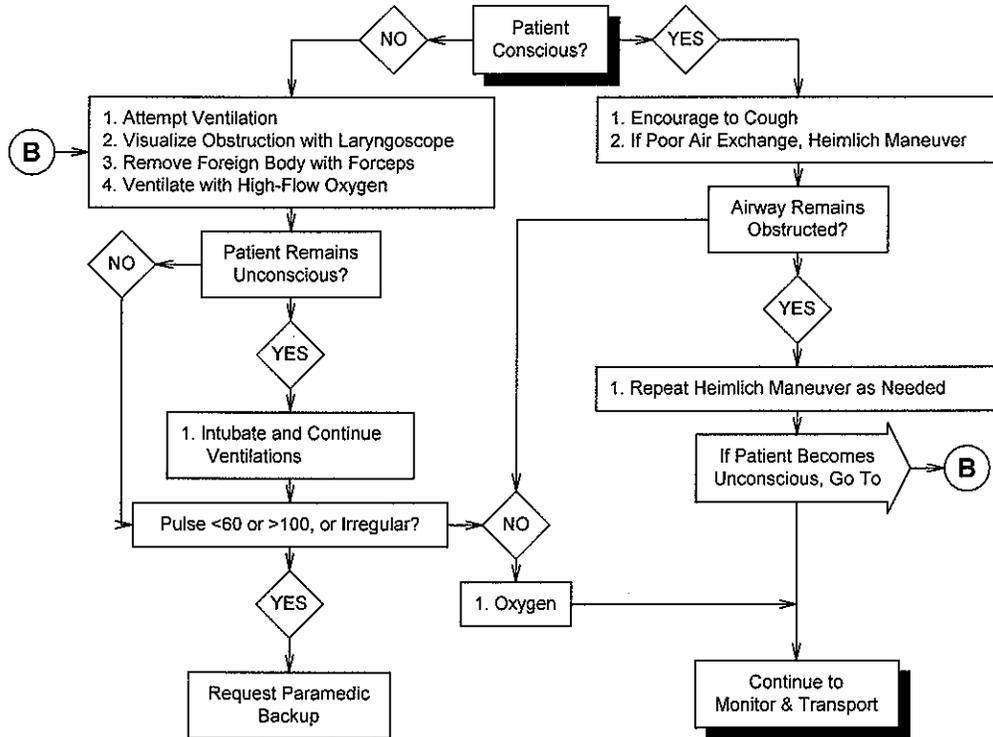
ADVANCED
EMT



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Expires 07-31-2018

FOREIGN BODY AIRWAY OBSTRUCTION

ADVANCED
EMT

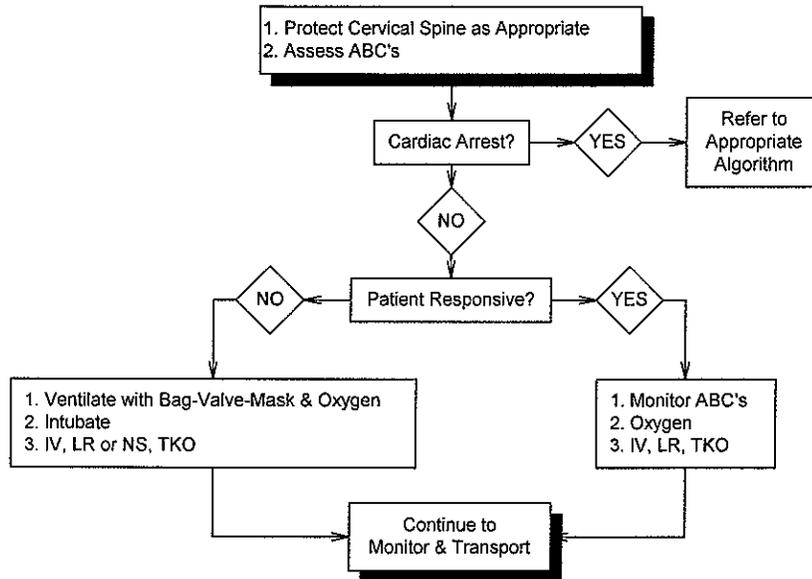


BOWIE FIRE DEPARTMENT
EMS DIVISION

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NEAR DROWNING

ADVANCED
EMT



- Consider spinal cord trauma, air embolism, hypothermia, alcohol or drug ingestion, hypoglycemia, seizures and myocardial infarction as accompanying problems or underlying causes.
- All near drowning patients, no matter how mild the episode appears to be, should be transported for observation & evaluation.

**BOWIE FIRE DEPARTMENT
EMS DIVISION**

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CARDIAC CHEST PAIN or SUSPECTED MYOCARDIAL INFARCTION

**ADVANCED
EMT**

AIR TRANSPORT SHOULD BE CONSIDERED WHEN ITS USE WOULD EXPEDITE AN AMI PATIENT'S ARRIVAL AT THE RECEIVING FACILITY.

1. Oxygen
2. IV, LR or NS, TKO
3. Aspirin 325mg, p.o.
4. Thrombolytic Checklist
5. Initiate Transport

BP >90 Systolic with Adequate Perfusion?

NO

Refer to Cardiogenic Shock Algorithm

YES

Patient Taken 3 or More Nitroglycerin Tablets in Last 10 Minutes?

YES

NO

1. Nitroglycerin, 0.4mg, Sublingual

Pain Relieved?

YES

NO

Repeat Nitroglycerin, Every 5 min., Until
1. Pain Relieved
2. Total of 3 Given
3. Systolic BP <90

Request Paramedic Backup

Continue to Monitor & Transport

Thrombolytic Checklist

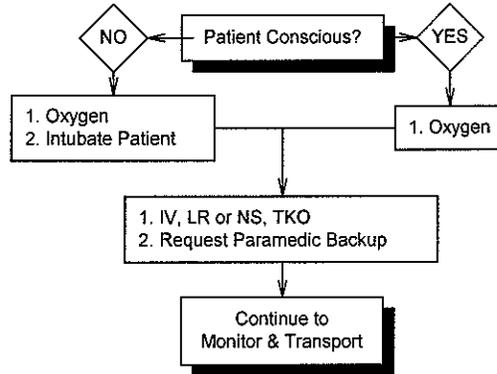
- () Chest pain of probable cardiac origin
- () Patient > 30 years old
- () Systolic BP < 180mmHg
- () Diastolic BP < 110mmHg
- () Chest Pain Present >15min
- () No CVA or other serious CNS problems in past 6mo
- () No surgery or major trauma in the past 2 weeks
- () No bleeding problems
- () Not pregnant

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CARDIOGENIC SHOCK

ADVANCED
EMT



**BOWIE FIRE DEPARTMENT
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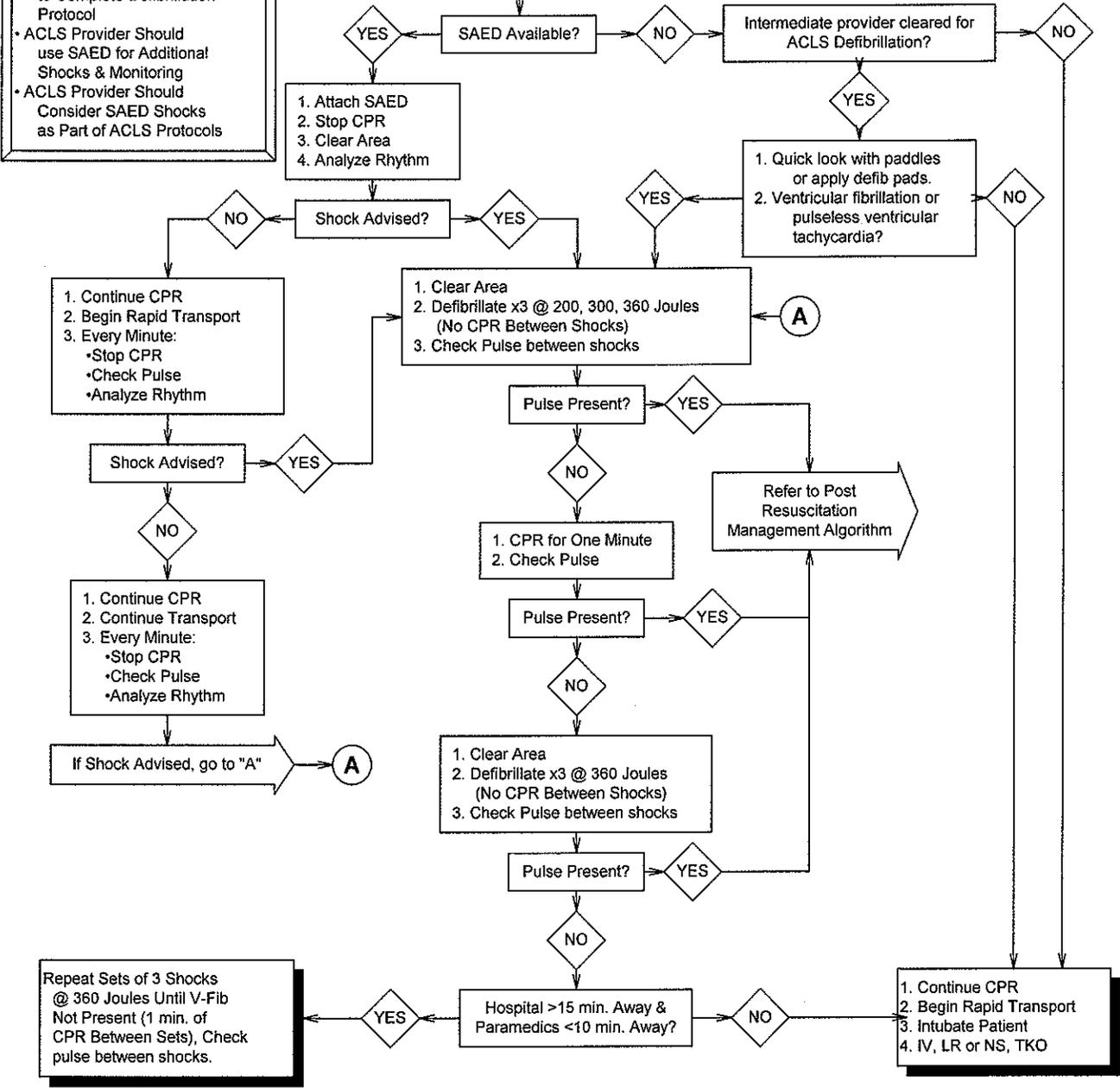
CARDIAC ARREST

**ADVANCED
EMT**

SCENE COORDINATION

- ACLS Provider has Scene Authority
- ACLS Provider Should Allow SAED Operator to Complete Defibrillation Protocol
- ACLS Provider Should use SAED for Additional Shocks & Monitoring
- ACLS Provider Should Consider SAED Shocks as Part of ACLS Protocols

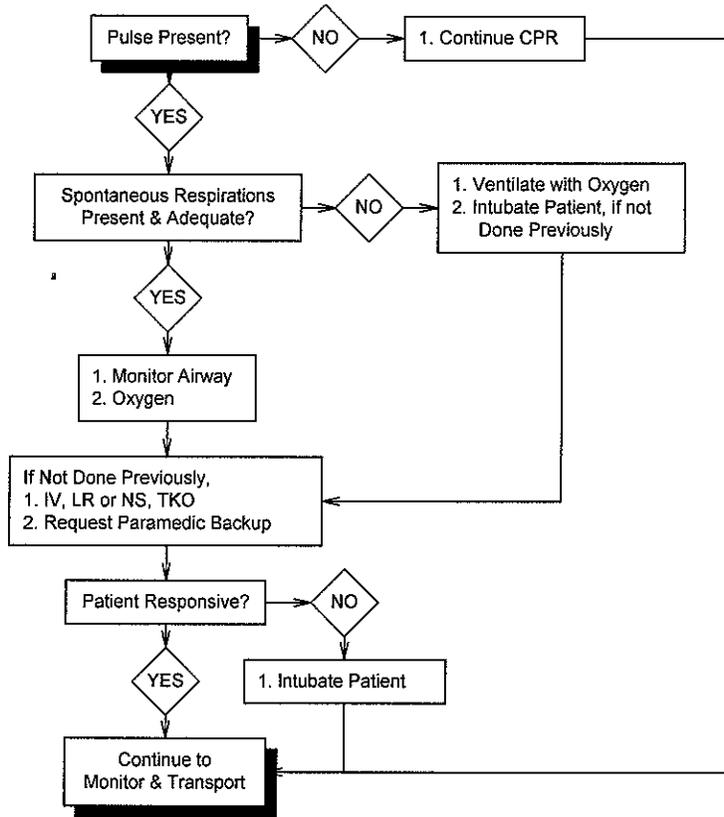
1. ABC's
2. CPR
3. Oxygen
4. Request Paramedic Backup



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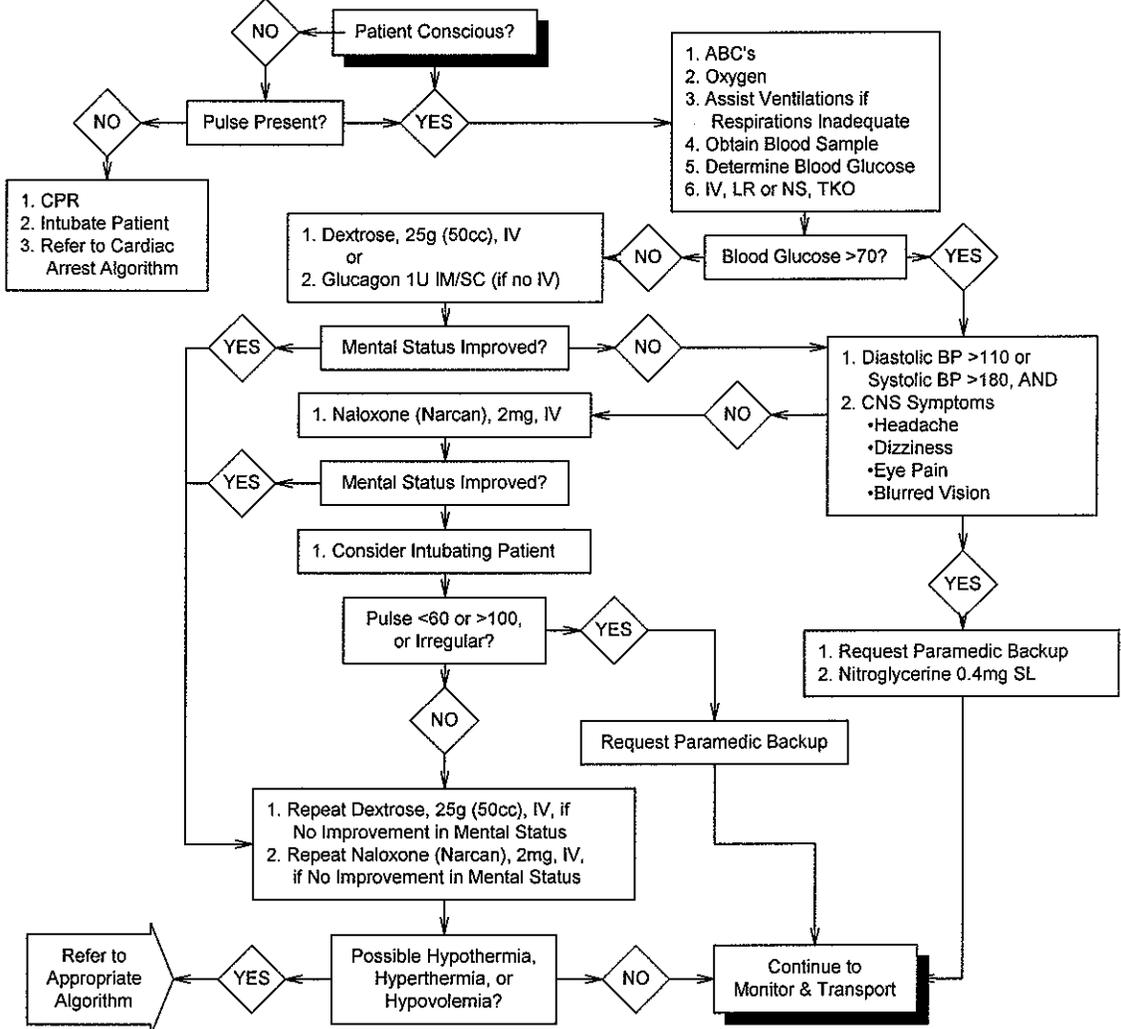
POST RESUSCITATION MANAGEMENT

ADVANCED
EMT



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Expires 07-31-2018

**DECREASED LEVEL OF
CONSCIOUSNESS or
NEUROLOGIC SYMPTOMS*
(NON-TRAUMATIC)**



***NEUROLOGIC SYMPTOMS**
1. Any Motor or Sensory Deficit
2. Any Altered Level of Consciousness

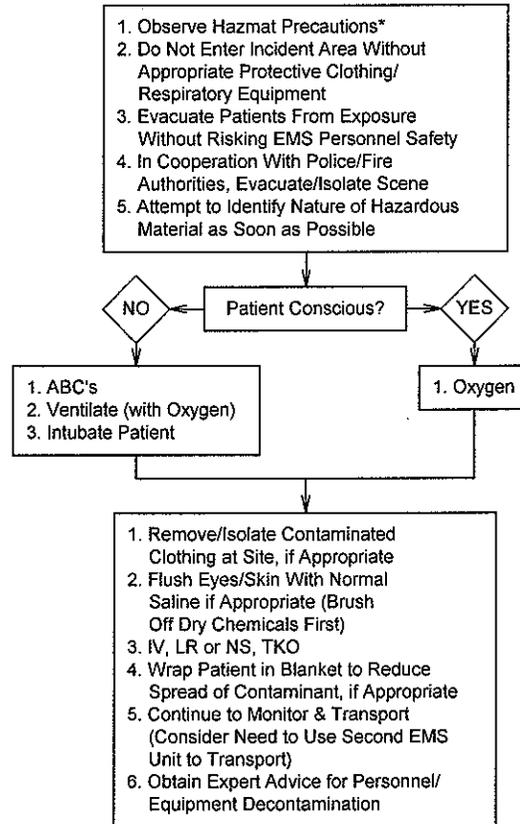
PEDIATRIC DOSE
•Dextrose 25% (D25W), 2cc/kg, IV
•Naloxone (Narcan), 0.01mg/kg, IV
•Glucagon 20mcg/kg, IM/SC

**BOWIE FIRE DEPARTMENT
EMS DIVISION**

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HAZARDOUS/TOXIC MATERIAL EXPOSURE

**ADVANCED
EMT**



HAZMAT PRECAUTIONS

1. Assume ALL Chemicals Hazardous Until Proven Otherwise
2. Approach From Upwind
3. Stay Out of Low-Lying Areas; Stay Uphill if Possible
4. Do Not Walk Into or Touch Spilled Chemicals;
Wear Gloves When Touching Contaminated Patients
5. Avoid Smoke, Gasses, Fumes, Vapors
6. Keep Combustibles Away
7. Keep Ignition Sources Away

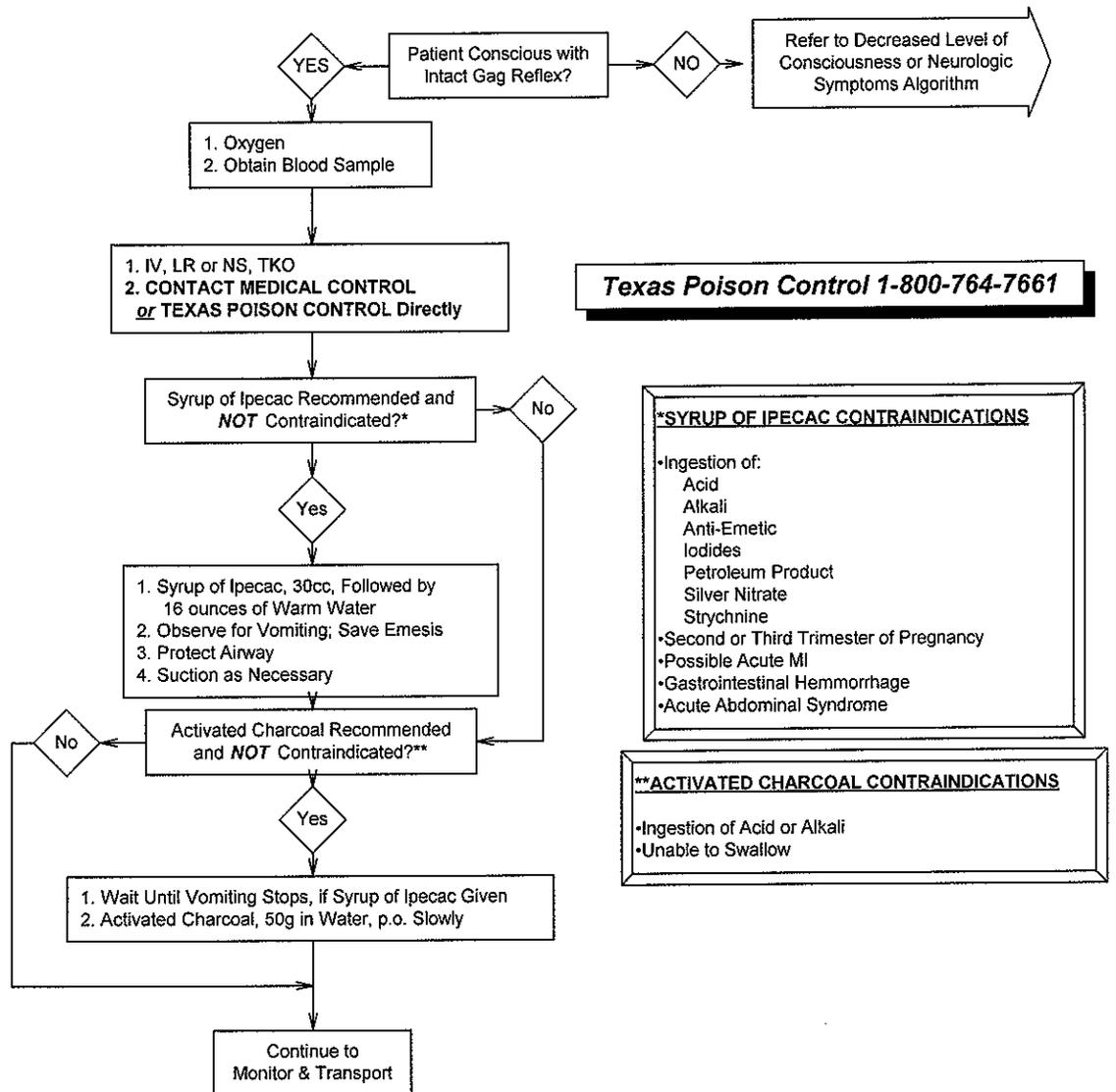
- In Multiple Patient Incidents, Use Triage to Determine Which Patients Receive IV's
- All Patients Should Be Transported for Observation Regardless of how Mild the Episode Seems to be
- Rescue Attempts, Scene Management, & Patient Care Should be Based on Best Information Available about the Material
- Coordinate with Fire Authorities & Regional EMS Communications Center to Obtain Information

BOWIE FIRE DEPARTMENT
EMS DIVISION

Effective 07-01-2016
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POISONING/OVERDOSE

**ADVANCED
EMT**



Texas Poison Control 1-800-764-7661

***SYRUP OF IPECAC CONTRAINDICATIONS**

- Ingestion of:
 - Acid
 - Alkali
 - Anti-Emetic
 - Iodides
 - Petroleum Product
 - Silver Nitrate
 - Strychnine
- Second or Third Trimester of Pregnancy
- Possible Acute MI
- Gastrointestinal Hemorrhage
- Acute Abdominal Syndrome

****ACTIVATED CHARCOAL CONTRAINDICATIONS**

- Ingestion of Acid or Alkali
- Unable to Swallow

PEDIATRIC DOSE

- Syrup of Ipecac, 5-10cc, Followed by 8 ounces of Warm Water
- Activated Charcoal, 25g, p.o.

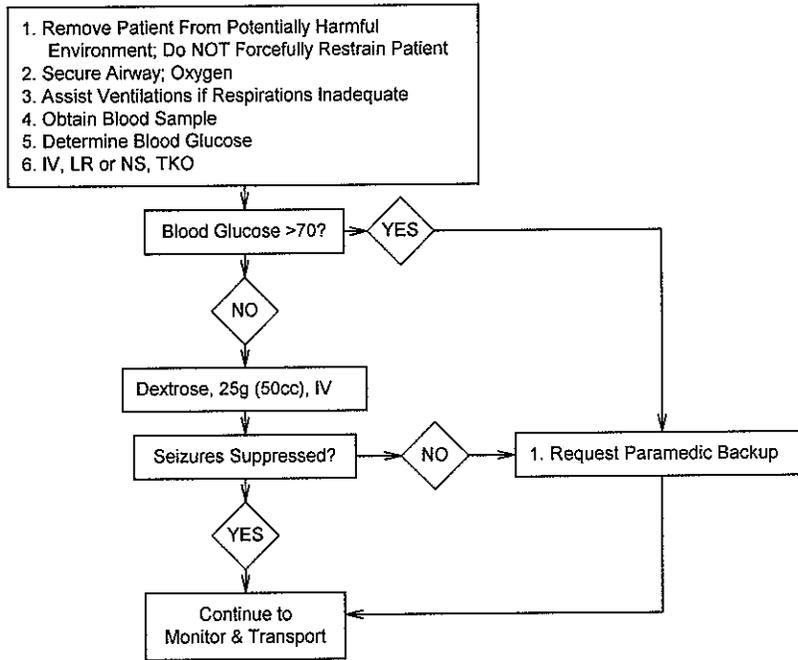
Bring Back ALL Potential Agent Containers and, if Possible, Samples of Agents to Emergency Department

BOWIE FIRE DEPARTMENT
EMS DIVISION

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SEIZURES

**ADVANCED
EMT**



PEDIATRIC DOSE

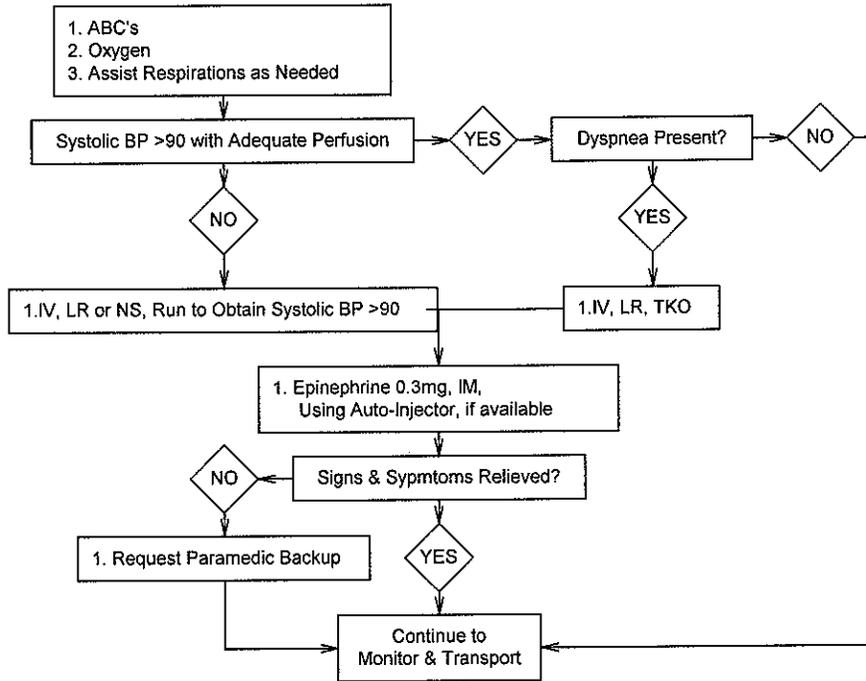
•Dextrose 25% (D25W), 2cc/kg, IV

BOWIE FIRE DEPARTMENT
EMS DIVISION

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ALLERGIC REACTION

ADVANCED
EMT



PEDIATRIC DOSE

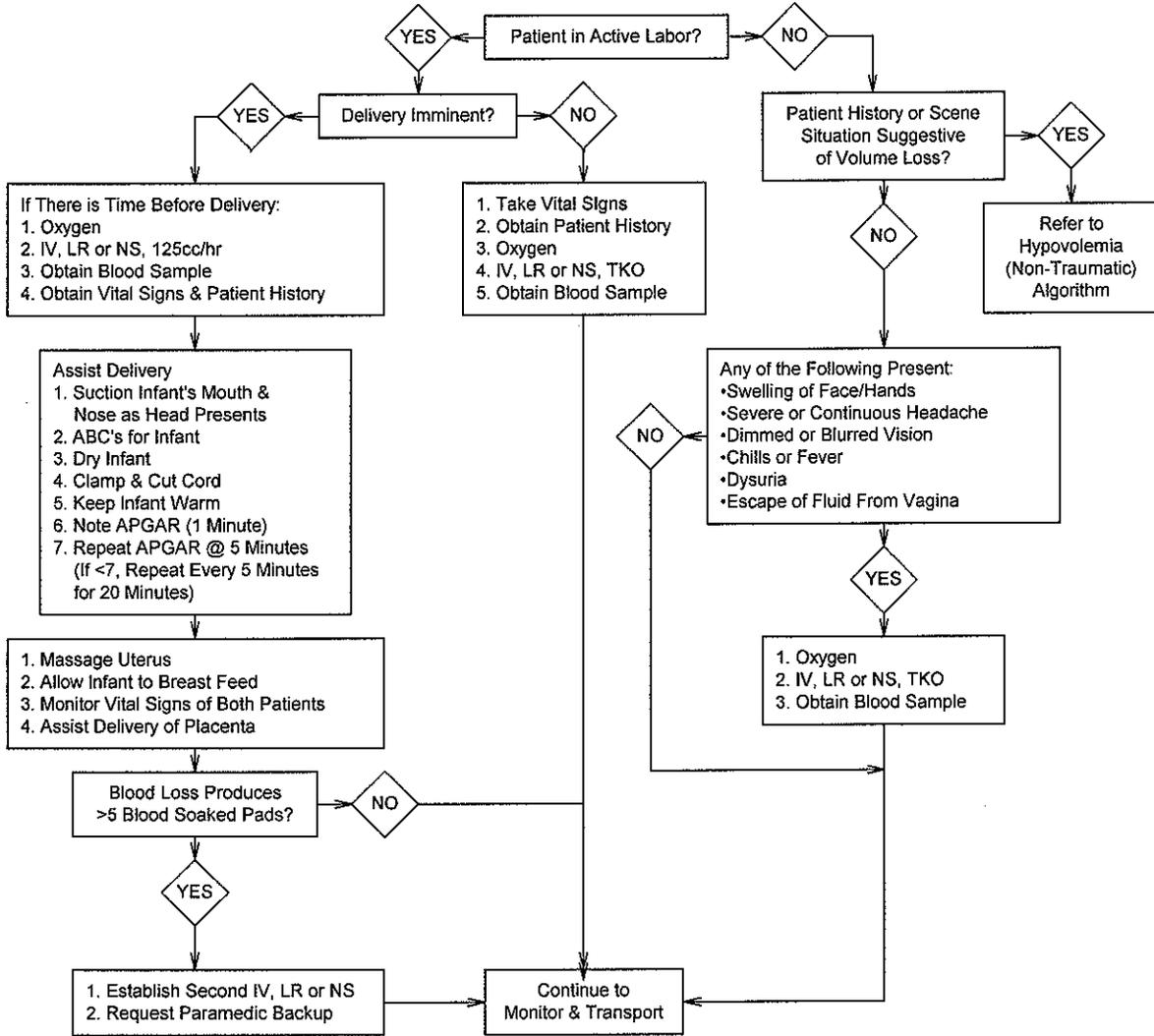
•Epinephrine, 0.15mg, IM, Using Auto-Injector

**BOWIE FIRE DEPARTMENT
EMS DIVISION**

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OBSTETRIC EMERGENCY

**ADVANCED
EMT**

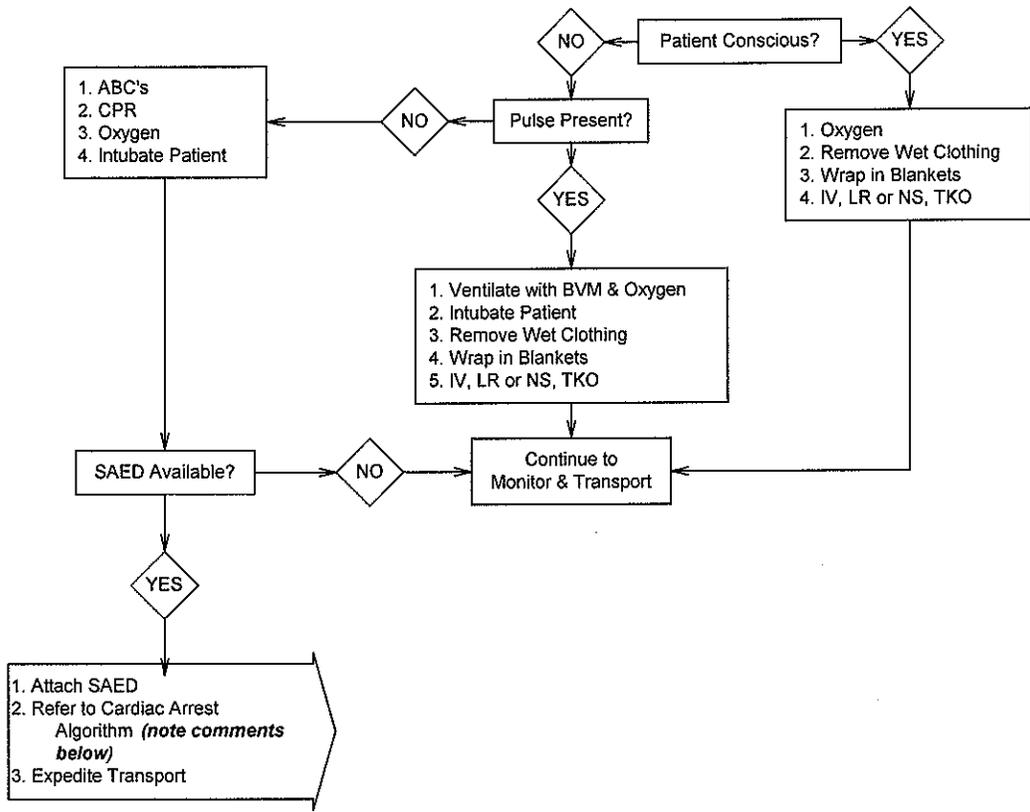


<i>Skin</i>	<i>0 Points</i>	<i>1 Point</i>	<i>2 Points</i>
Appearance	Blue or Pale	Body Pink Extremities Blue	Completely Pink
Pulse Rate	Absent	Below 100	Above 100
Grimace	No Response	Grimaces, or Whimpers	Active Cries
Activity	Absent (Flaccid)	Some Flexion of Extremities	Active Extremity Motion
Respiratory Effort	Absent	Slow and irregular	Strongly Crying

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COLD EXPOSURE (SYSTEMIC HYPOTHERMIA)

ADVANCED
EMT



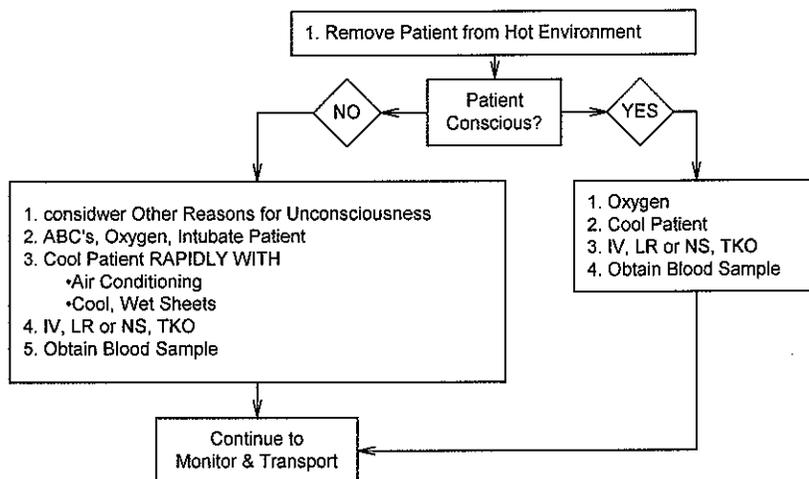
- Suspect Hypothermia in any Patient with An Altered Level of Consciousness in a Cool Environment
- Move ALL Patients Gently, to Avoid Serious Arrhythmias
- Do Not Actively Rewarm Patient in Prehospital Environment
- Avoid Extensive Advanced Life Support in Prehospital Environment
- Resuscitate ALL Cardiac Arrest Patients who are Hypothermic

BOWIE FIRE DEPARTMENT
EMS DIVISION

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HEAT EXPOSURE (HEAT STROKE)

ADVANCED
EMT

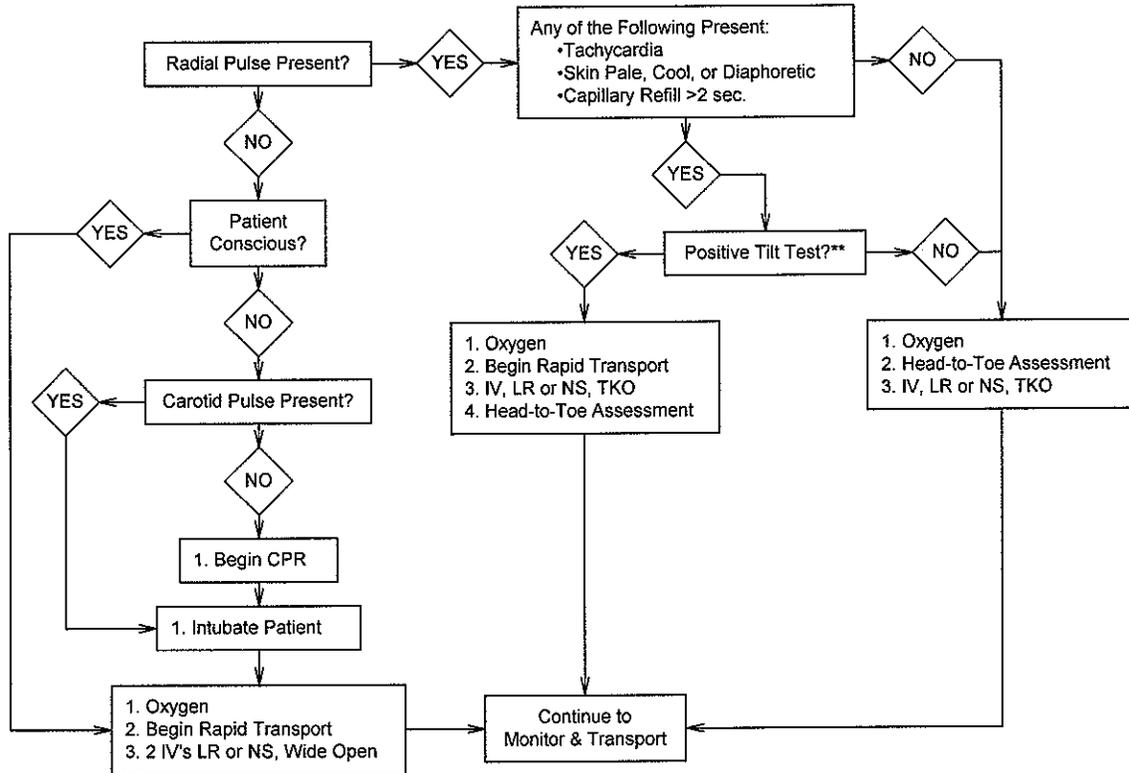


Suspect Heat Stroke in any Patient with an Altered
Level of Consciousness in a Hot Environment

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HYPOVOLEMIA* (NON-TRAUMATIC)

ADVANCED
EMT



*Includes History of Vomiting, Diarrhea, Bloody or Dark Stool, Abdominal Pain, or Possible Diabetic Hyperglycemic State

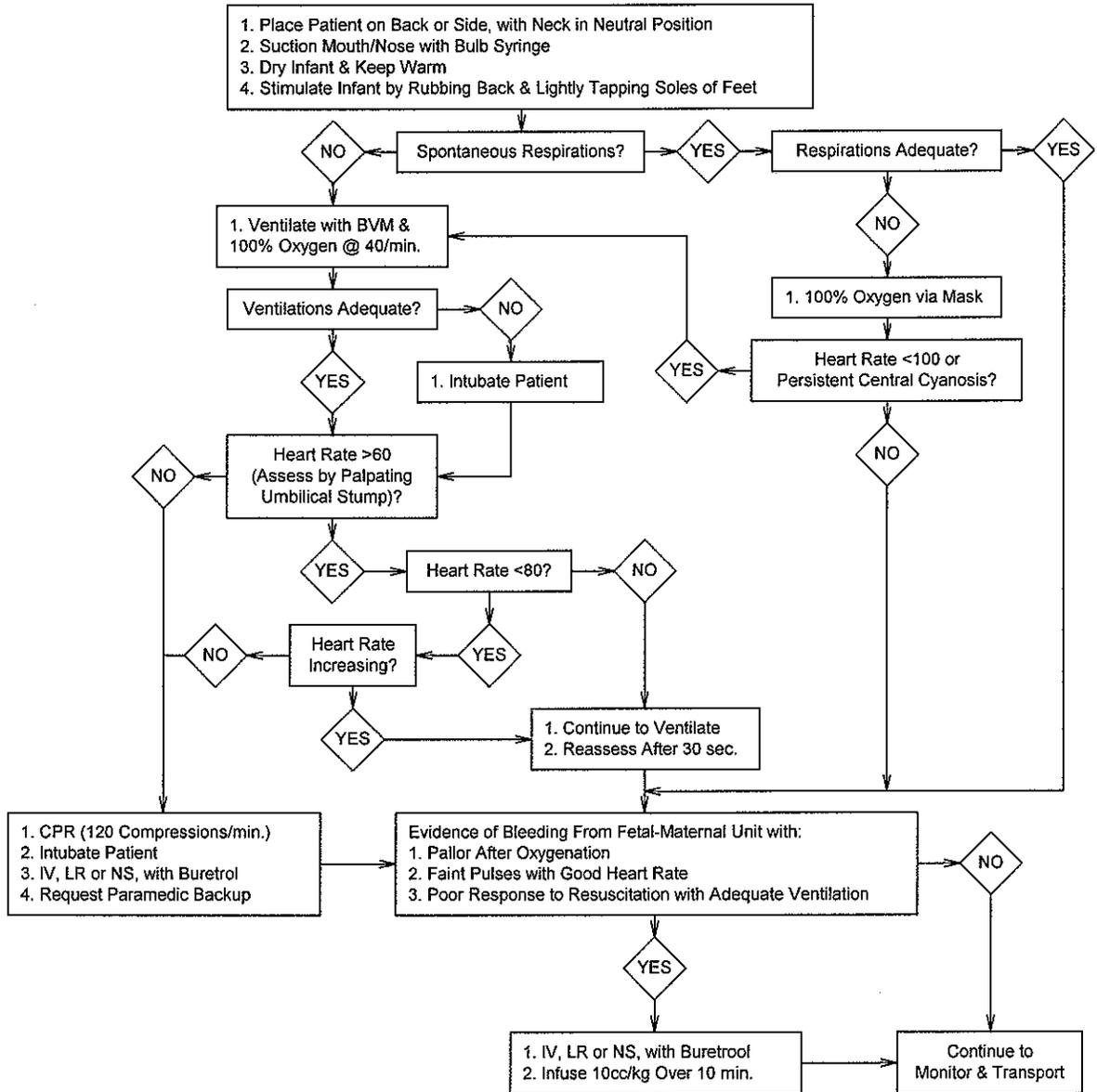
****POSITIVE TILT TEST**
Pulse Rate Increases by 20, Systolic BP Decreases by 20 or Diastolic BP by 10 when Patient is Raised from Supine to Sitting position OR Patient will Not Tolerate Being Raised From Supine to Sitting Position Because of Weakness, Dizziness, Presyncope, or Syncope.

PEDIATRIC DOSE
•Fluid Bolus, 20cc/kg, Over 5 min., Repeated Until Clinical Signs of Adequate Perfusion.

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NEONATAL RESUSCITATION

ADVANCED
EMT



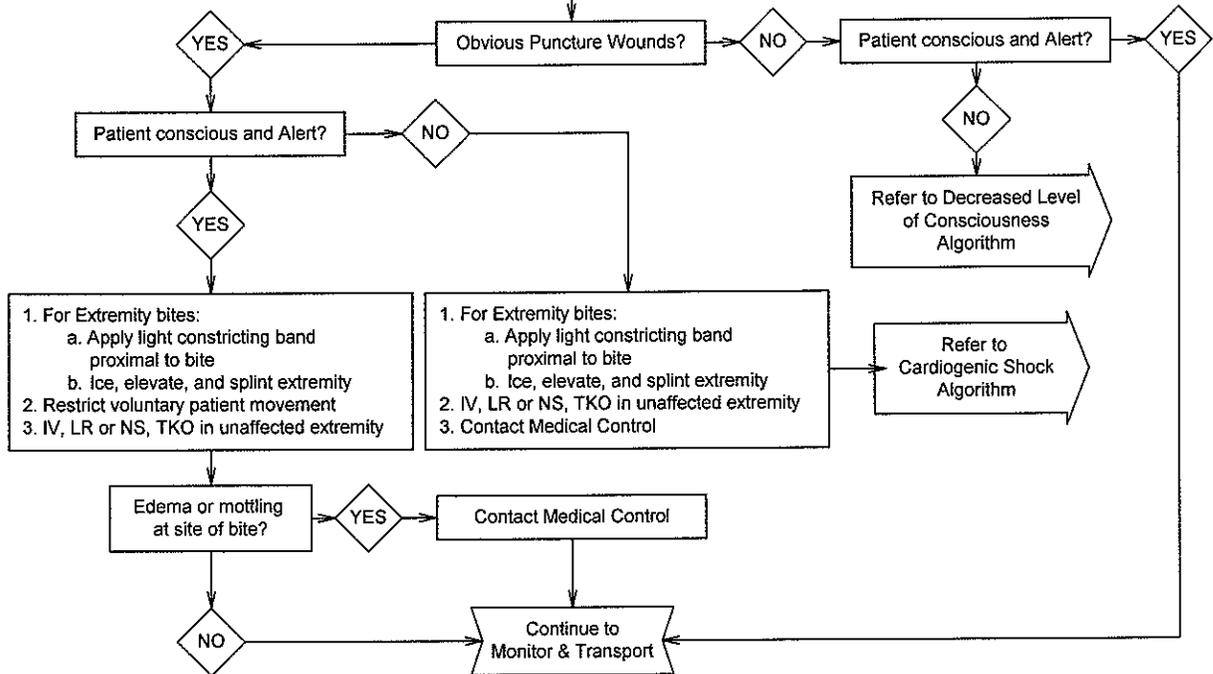
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EMS DIVISION**

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Snake Bite or Suspected Snake Bite

**ADVANCED
EMT**

1. Remove patient from danger. Assume venomous snake until proven otherwise.
2. Assess ABC's
3. Oxygen
4. Do not transport a live snake
5. Do not spend excessive time in search for snake, but bring snake if possible for identification.



As part of the patient history, determine any allergies to horses or horse serum.

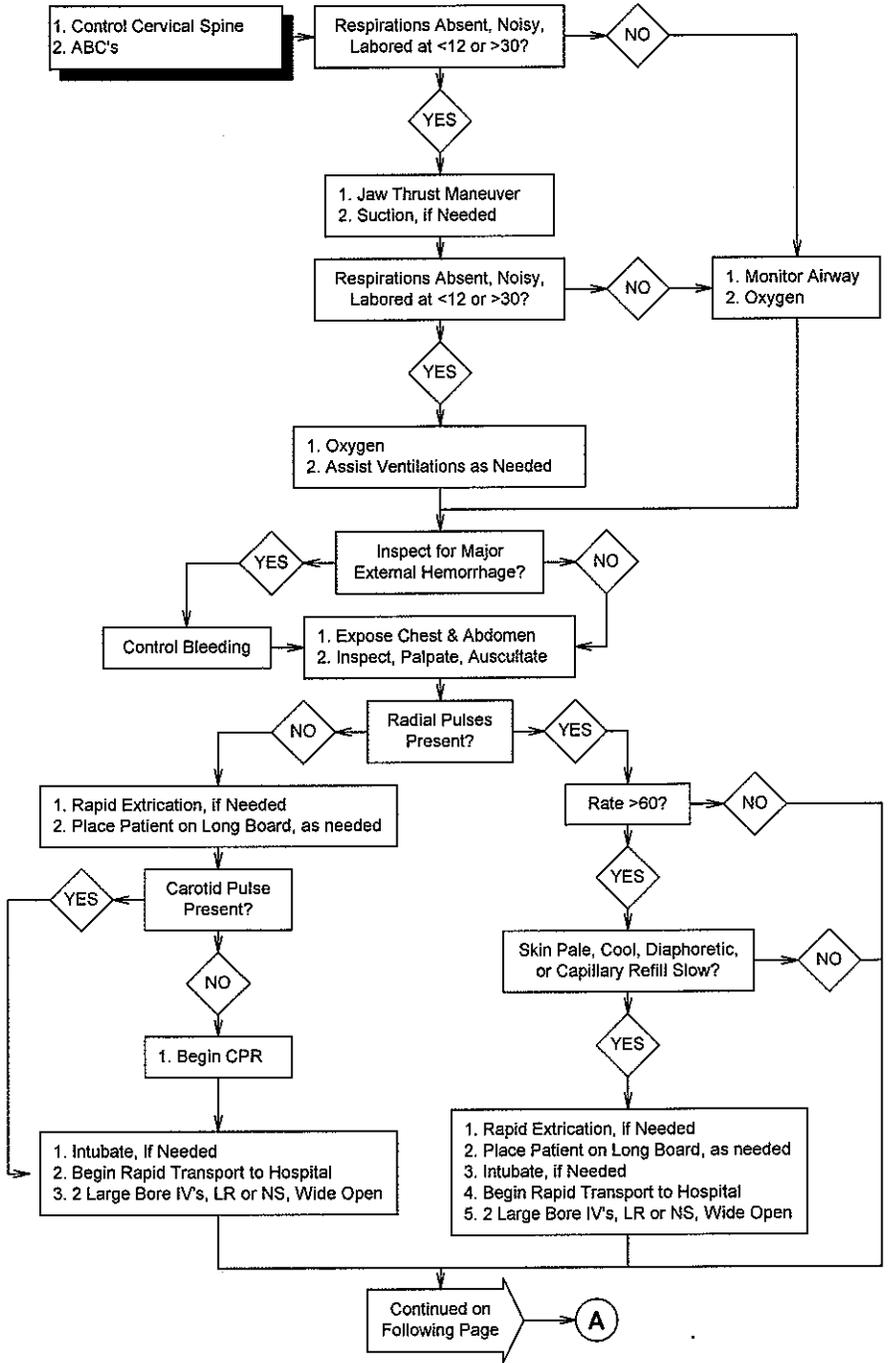
Question regarding previous doses of antivenin

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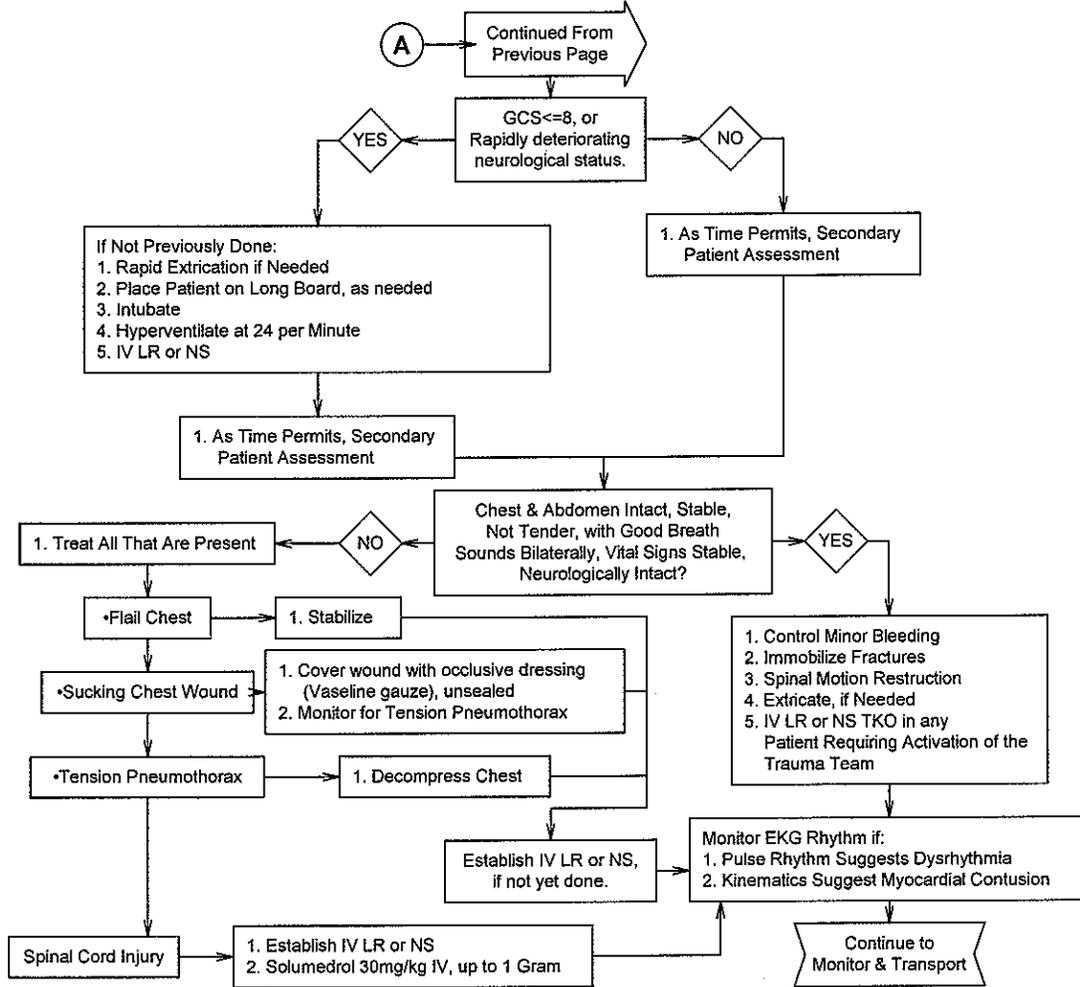
MAJOR TRAUMA

Paramedic



MAJOR TRAUMA (Continued)

Paramedic



• Time on scene with Trauma patients shall not exceed 10 minutes unless extrication is required. Establish IV's en route to Hospital unless extrication is required.

If time on scene exceeds 10 minutes, reasons for delay should be documented.

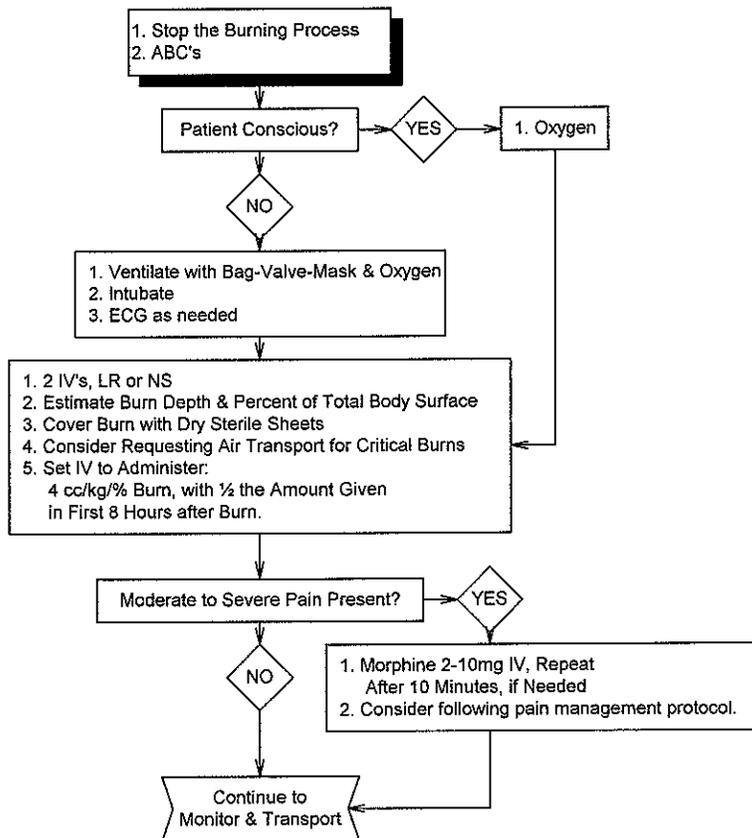
• If extrication >15 minutes is required or if time to definitive care is likely to exceed 25 minutes, consider air transport.

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BURNS (Moderate to Critical)

Paramedic



CRITICAL BURNS

1. Inhalation Injuries
2. All Burns of Face, Feet, Hands, Genitalia
3. Adult: 2° >25% TBSA
Child: 2° >20% TBSA
4. 3° >10% TBSA
5. All Electrical Burns
6. All Burns with Associated Trauma (Fractures, etc.)
7. All Burns in Patients <11 Years Old or >50 Years Old
8. Patients with Serious Underlying Medical Disease

MODERATE BURNS

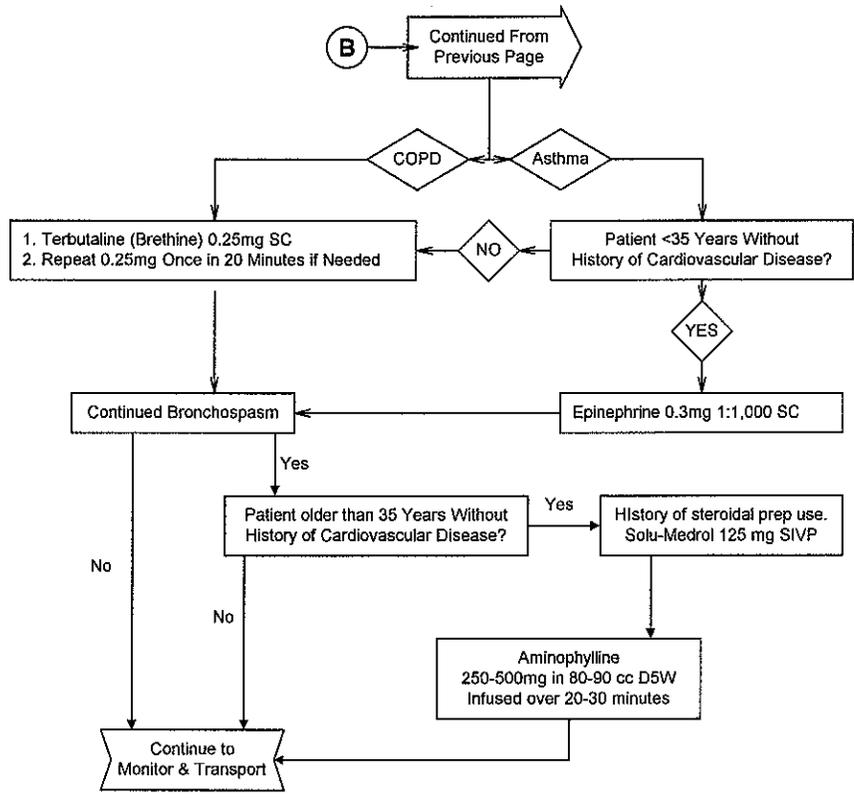
1. Adult: 2° 15-25% TBSA
Child: 2° 10-20% TBSA
2. 3° 2-10% TBSA

PEDIATRIC DOSES

•Morphine Sulfate 0.1-0.2 mg/kg

RESPIRATORY DISTRESS (Non-Traumatic) (Continued)

Paramedic



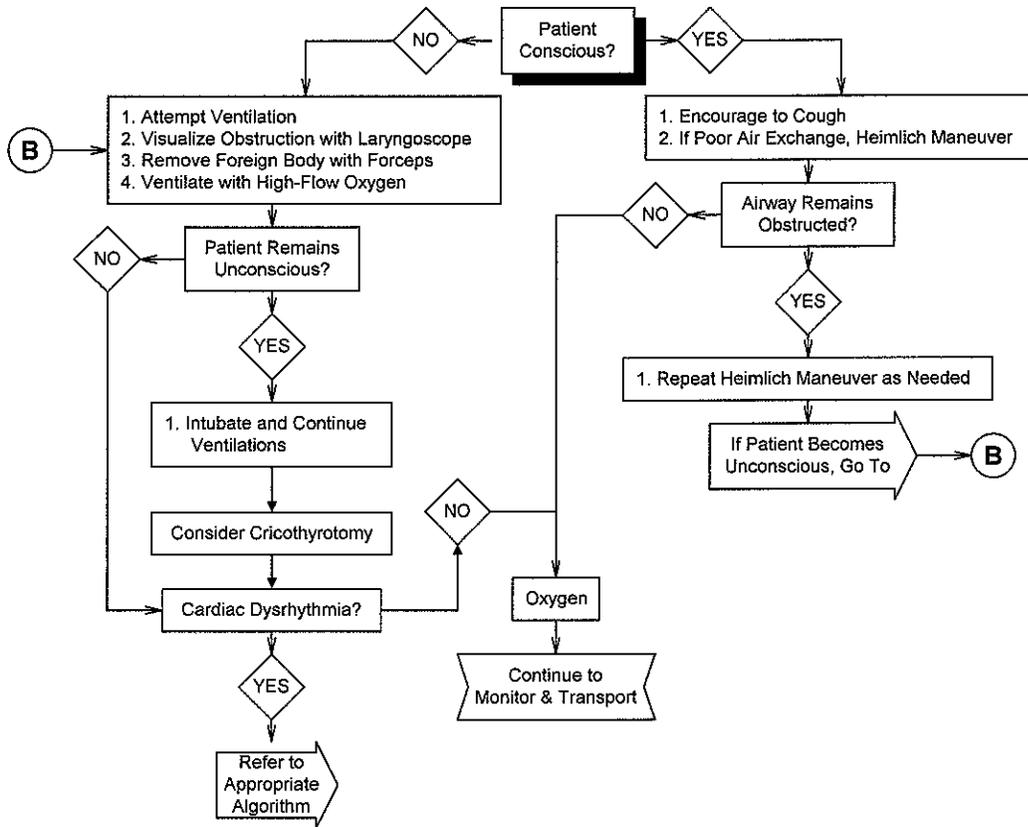
Adult:
If patient regularly takes a steroidal preparation,
consider Solu-Medrol 125 mg IVP.

PEDIATRIC DOSES	
•Albuterol	0.1-0.15 mg/kg, max 2.5 mg
•Furosemide (Lasix)	1mg/kg
•Morphine Sulfate	0.1-0.2mg/kg
•Epinephrine	0.01mg/kg SC 1:1,000, to a Max of 0.3mg
•Aminophylline	5 mg/kg in 50-100cc over 20-30 minutes

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FOREIGN BODY AIRWAY OBSTRUCTION

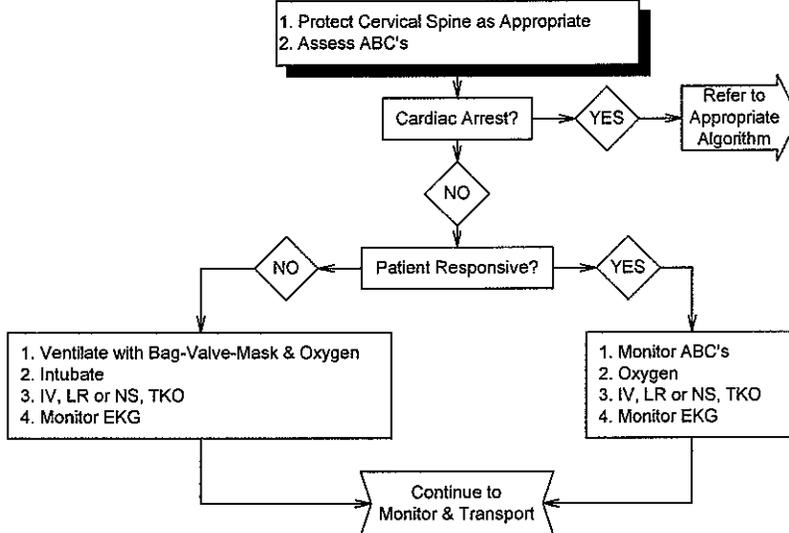
Paramedic



**BOWIE FIRE DEPARTMENT
EMS DIVISION**

NEAR DROWNING

Paramedic



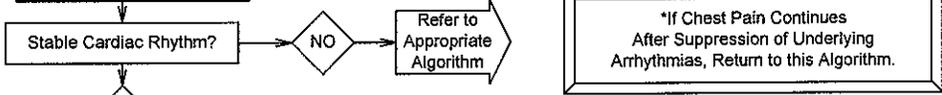
**If wheezing noted go to
Respiratory Distress Protocol**

- Consider spinal cord trauma, air embolism, hypothermia, alcohol or drug ingestion, hypoglycemia, seizures and myocardial infarction as accompanying problems or underlying causes.
- All near drowning patients, no matter how mild the episode appears to be, should be transported for observation & evaluation.

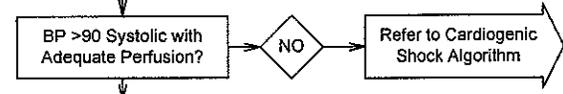
Paramedic

CARDIAC CHEST PAIN or SUSPECTED MYOCARDIAL INFARCTION

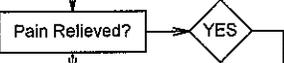
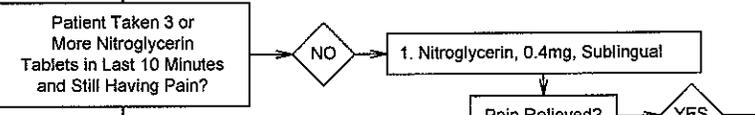
1. Oxygen
2. IV, LR or NS, TKO
3. Aspirin 81 mg X 4, p.o.
4. Monitor EKG
5. 12 lead ECG
6. Initiate Transport
7. Thrombolytic Checklist



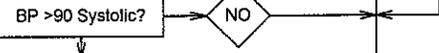
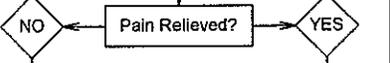
*If Chest Pain Continues
After Suppression of Underlying
Arrhythmias, Return to this Algorithm.



- Thrombolytic Checklist**
- () Chest pain of probable cardiac origin
 - () Patient > 30 years old
 - () Systolic BP < 180mmHg
 - () Diastolic BP < 110mmHg
 - () Chest Pain Present > 15min
 - () No CVA or other serious CNS problems in past 6mo
 - () No surgery or major trauma in the past 2 weeks
 - () No bleeding problems
 - () Not pregnant



1. Repeat Nitroglycerin Every 5 Minutes, Until Pain Relieved or Total of 3 Given



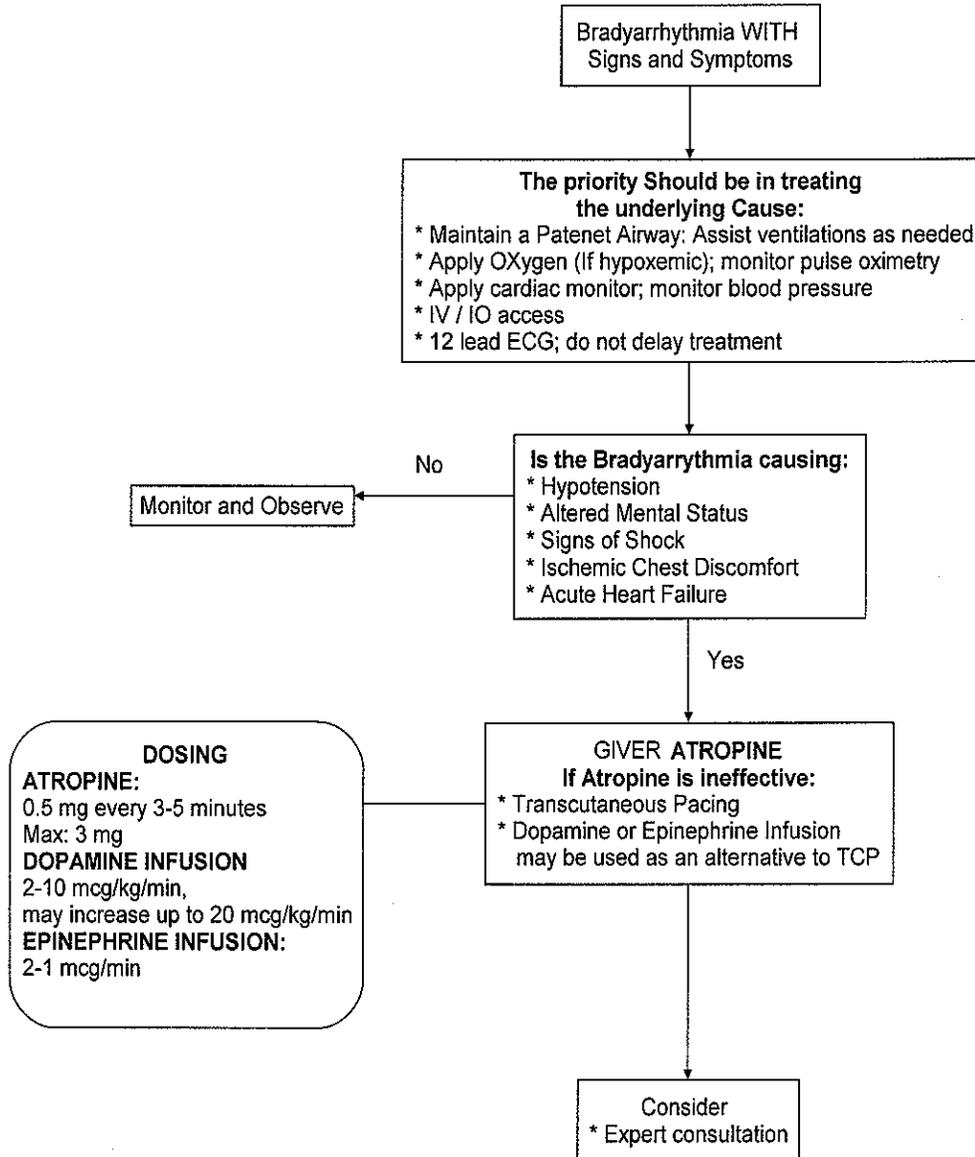
AIR TRANSPORT SHOULD BE CONSIDERED WHEN ITS USE WOULD EXPEDITE AN AMI PATIENT'S ARRIVAL AT THE RECEIVING FACILITY.

Morphine Sulfate, 2-10mg, IV
Consider Analgesics protocol

Continue to Monitor & Transport

BRADYARRHYTHMIA - ADULT

Paramedic

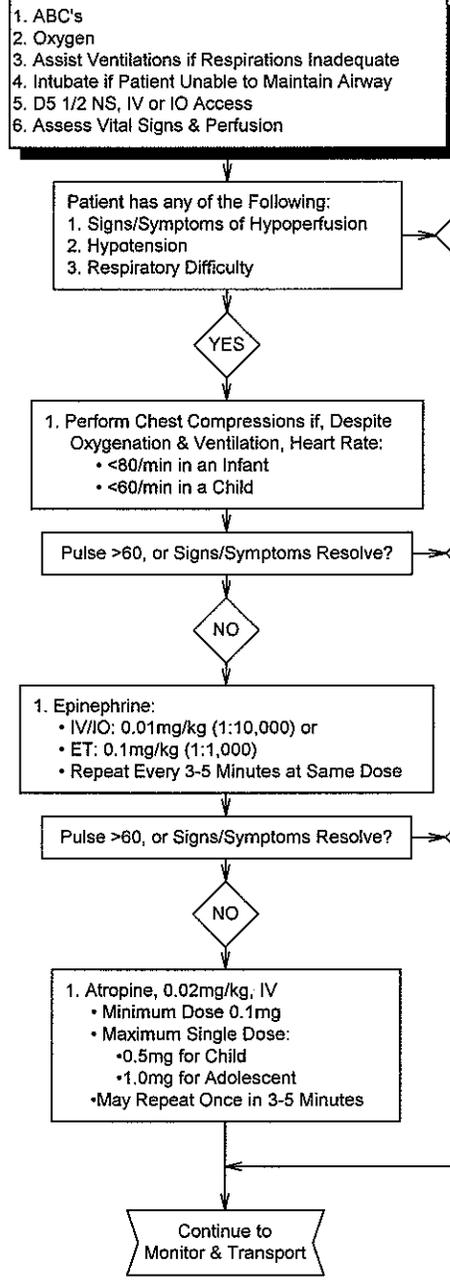


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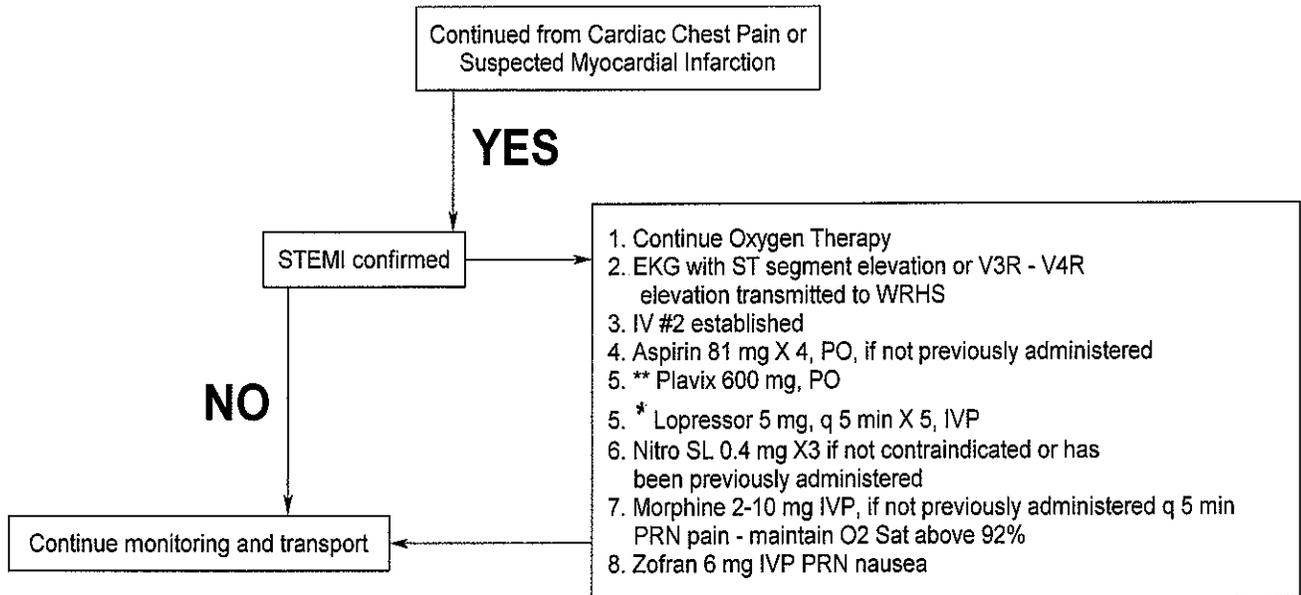
**BRADYARRHYTHMIA -
PEDIATRIC**

Paramedic



BOWIE FIRE DEPARTMENT EMS DIVISION

STEMI ST ELEVATED MI



* WITHHOLD LOPRESSOR IF HEART RATE IS LESS THAN 60 BPM OR SYSTOLIC BLOOD PRESSURE IS LESS THAN 110 mm/hg

** IF PATIENT IS CURRENTLY TAKING PLAVIX AT HOME, THAN ADMINISTER 75 mg PO

SIGNIFICANT PVC's*

Paramedic

*SIGNIFICANT PVC's

1. Runs of Ventricular Tachycardia
2. R on T Phenomenon
3. Multifomed (Multifocal) PVC's
4. >5 per Minute & Patient experiencing Chest Pain, Hypotension, or Shortness of Breath

1. Oxygen
2. IV, LR or NS, TKO
3. Lidocaine, 1mg/kg, IV

PVC's Suppressed?

YES

NO

1. Lidocaine, 1 mg/kg, IV, Every 5 Minutes, Until PVC's Suppressed or 3mg/kg Given
2. After arrythmia is abolished start Lidocaine drip at 2 mg/kg
3. Increase Lidocaine, 1mg/kg, After Each Bolus, To a Maximum of 4mg/min

PVC's Suppressed?

YES

1. Lidocaine drip, 2-4mg/min

NO

Procainamide 20mg/min
Until: QRS widens by 50% or more
Arrythmia has been abolished
1 Gram administered
Hypotension ensues

PVC's suppressed

YES

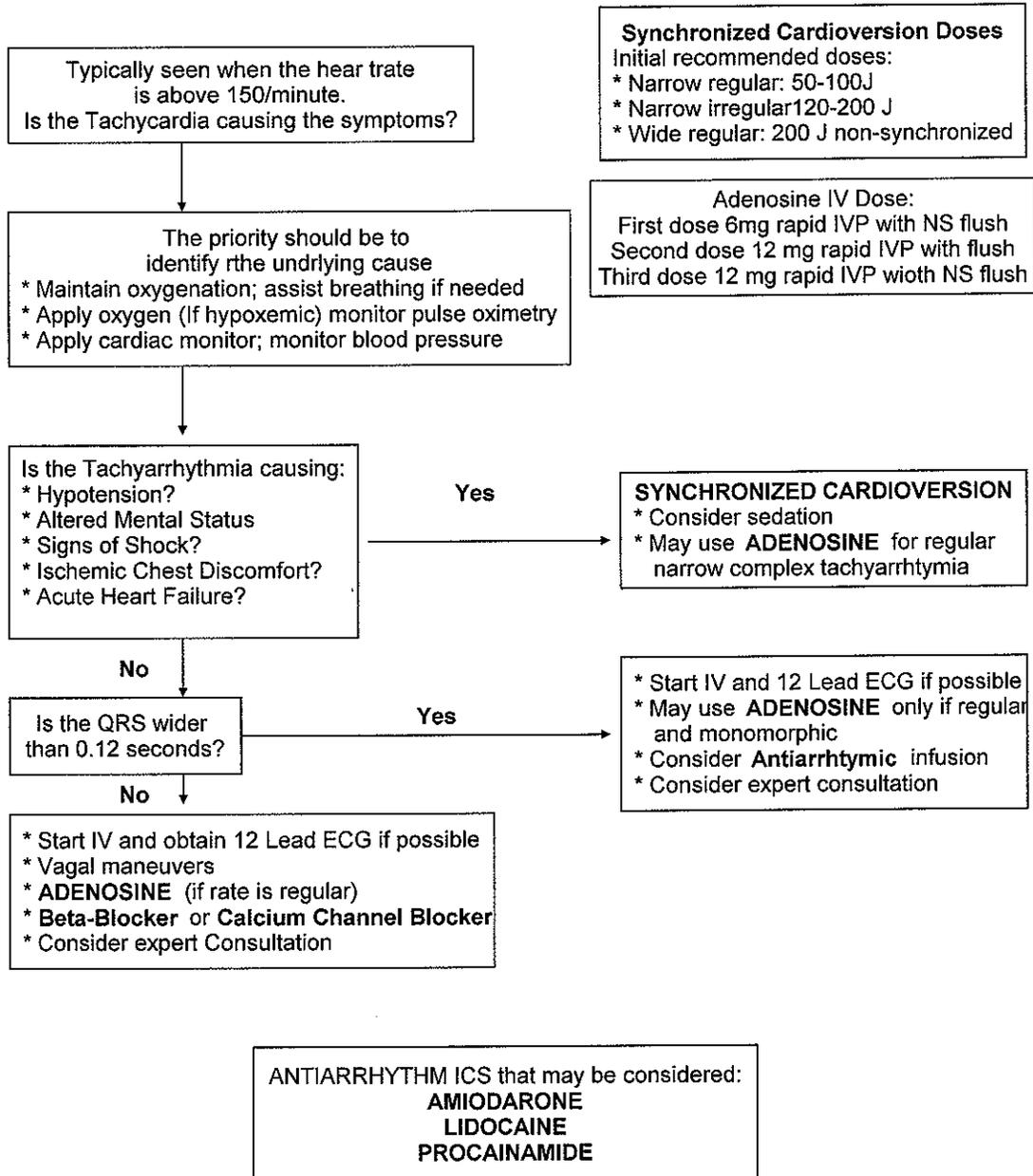
1. Stop Lidocaine
2. Start Procainamide
2 - 4 mg/min

Continue to Monitor & Transport

PEDIATRIC DOSES

- Lidocaine IV 1.0mg/kg
 - Lidocaine Drip 10mcg/kg/min
- DO NOT USE BRETYLIUM TOSYLATE**
DO NOT USE PRONESTYL

Adult (with a pulse) Tachycardia

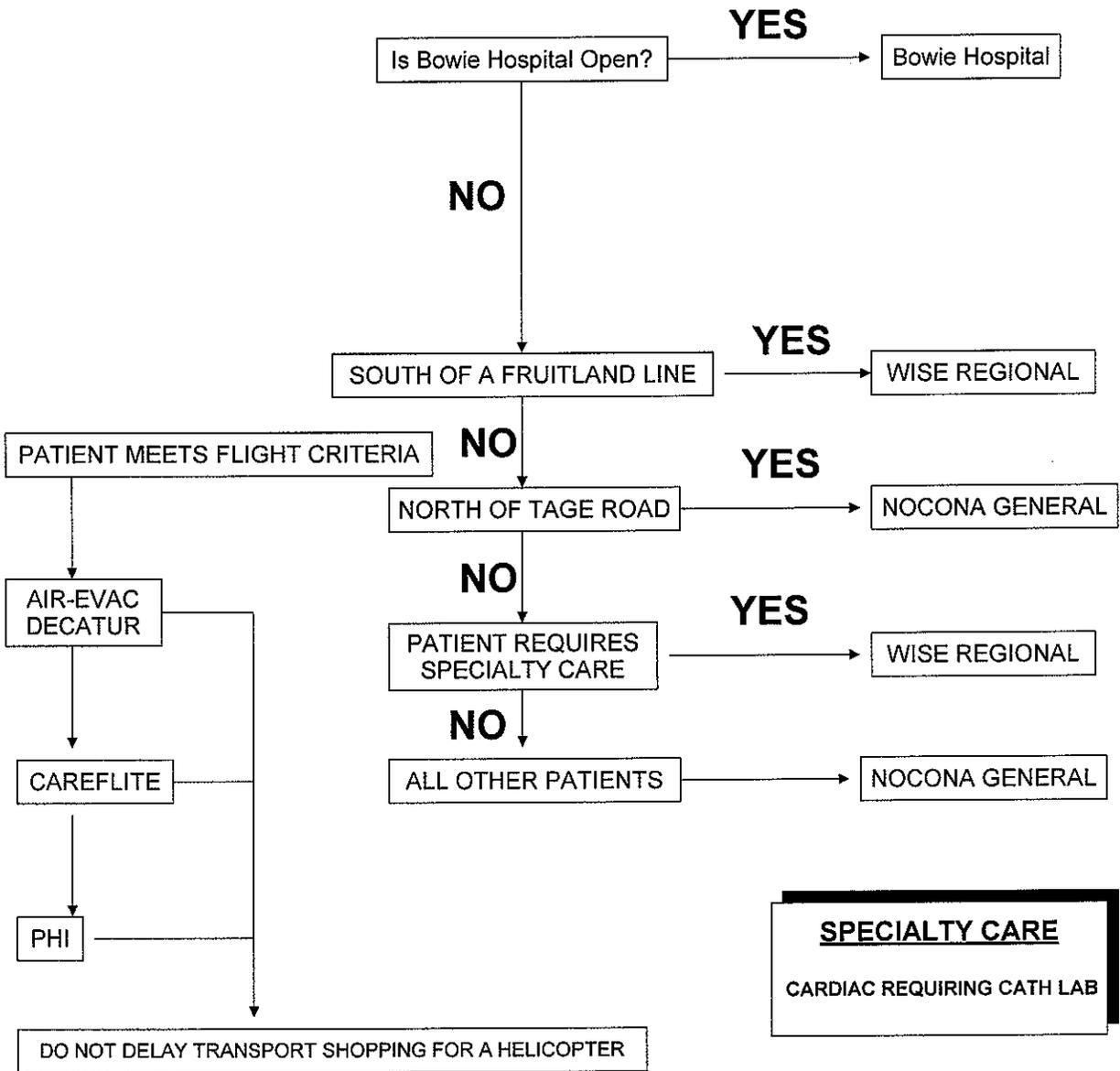


EFFECTIVE 07/01/2016
EXPIRES 07/31/2018

ALL LEVELS

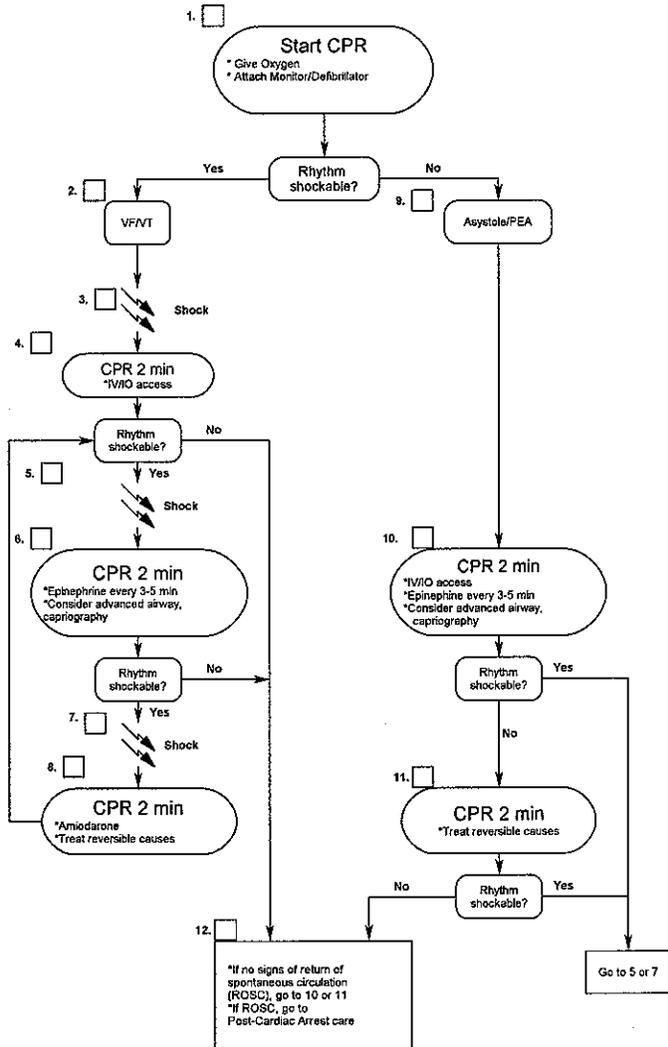
BOWIE FIRE DEPARTMENT EMS DIVISION

TRANSPORT PROTOCOL



Adult Cardiac Arrest

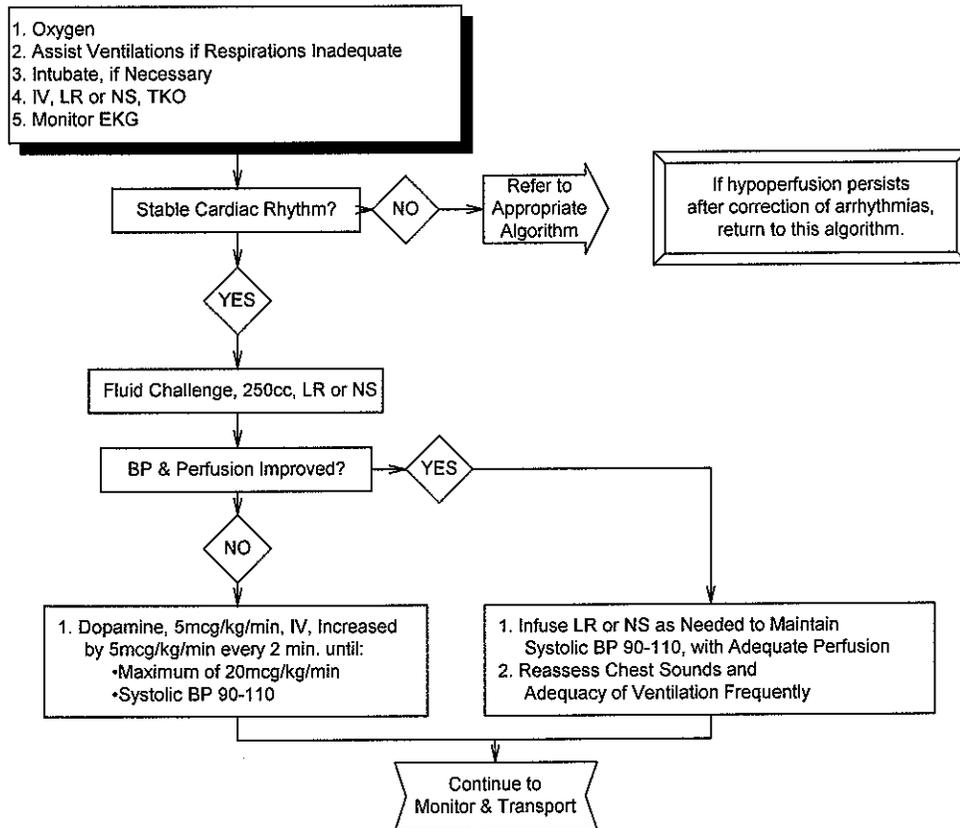
Paramedic



- CPR Quality**
 - *Push hard (\geq inches (5 cm)) and fast (\geq 100/min) and allow complete chest recoil
 - *Minimize interruptions in compressions
 - *Avoid excessive ventilation
 - *Rotate compressor every 2 minutes
 - *If no advanced airway, 30:2 compression-ventilation ratio
 - *Quantitative waveform capnography
 - If PETCO₂ <10 HG, attempt to improve CPR quality
 - *Intra-arterial pressure
 - If relaxation phase (diastolic) pressure <20 mm Hg, attempt to improve CPR quality
- Return to Spontaneous Circulation (ROSC)**
 - *Pulse and blood pressure
 - *Abrupt sustained increase in PETCO₂ (typically \geq 40 mm Hg)
 - *Spontaneous arterial Pressure waves with intra-arterial monitoring
- Shock Energy**
 - *Biphasic: Manufacturer recommendation (eg. Initial dose of 120-200 J; if unknown, use maximum available. Second and subsequent doses should be equivalent, and higher doses may be considered.
 - *Monophasic: 360 J
- Drug Therapy**
 - *Epinephrine IV/IO Dose: 1 mg every 3-5 minutes
 - *Vasopressin IV/IO Dose: 40 units can replace first or second dose of epinephrine
 - *Amiodarone IV/IO Dose: First dose: 300 mg bolus. Second dose: 150 mg.
- Advanced Airway**
 - *Supraglottic advanced airway or endotracheal intubation
 - *Waveform capnography to confirm and monitor ET tube placement
 - *8-10 breaths per minute with continuous chest compressions
- Reversible Causes**
 - Hypovolemia
 - Hypoxia
 - Hydrogen ion (acidosis)
 - Hypo-/hyperkalemia
 - Hypothermia
 - Tension pneumothorax
 - Tamponade, cardiac
 - Toxins
 - Thrombosis, pulmonary
 - Thrombosis, coronary

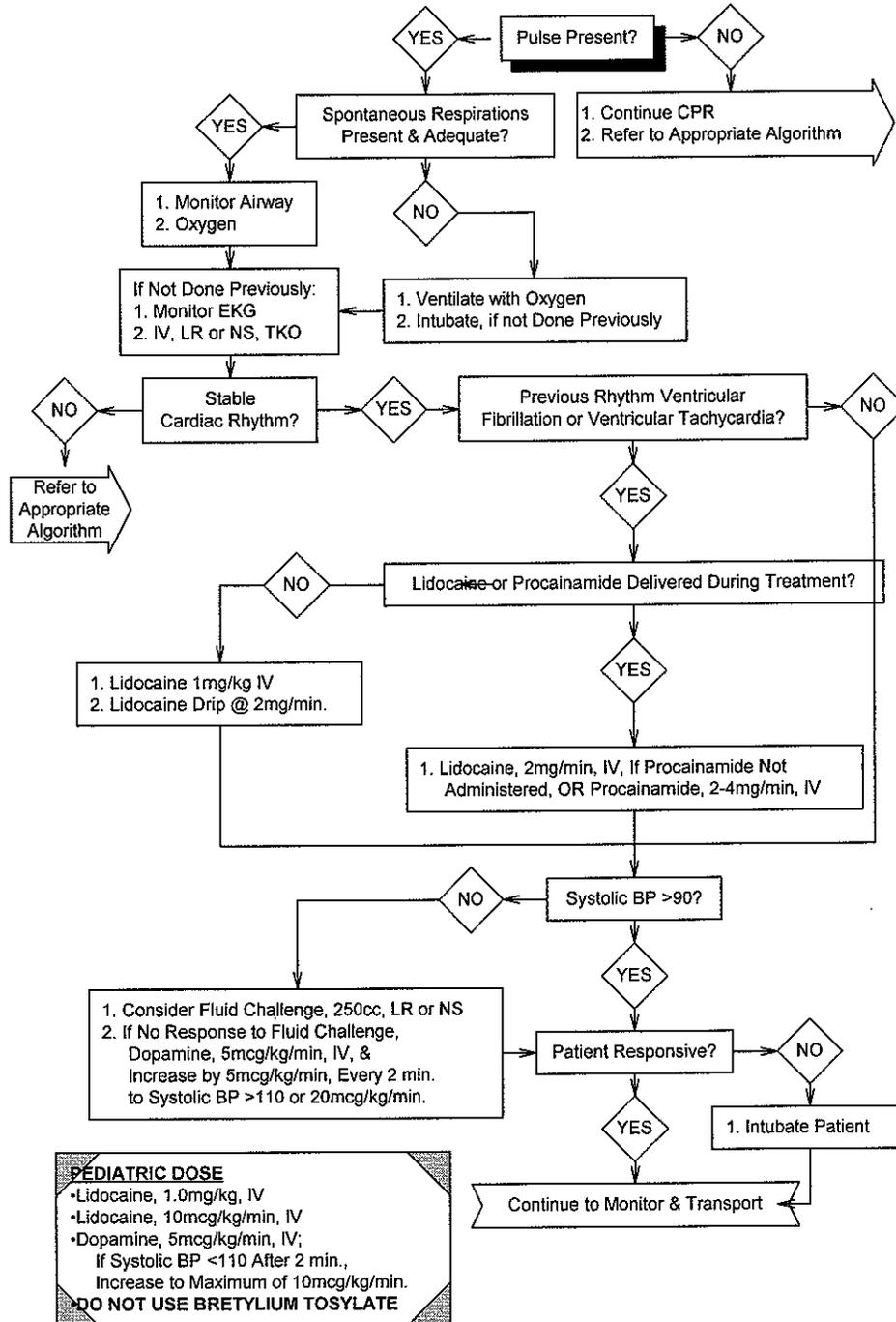
CARDIOGENIC SHOCK

Paramedic



POST-RESUSCITATION MANAGEMENT

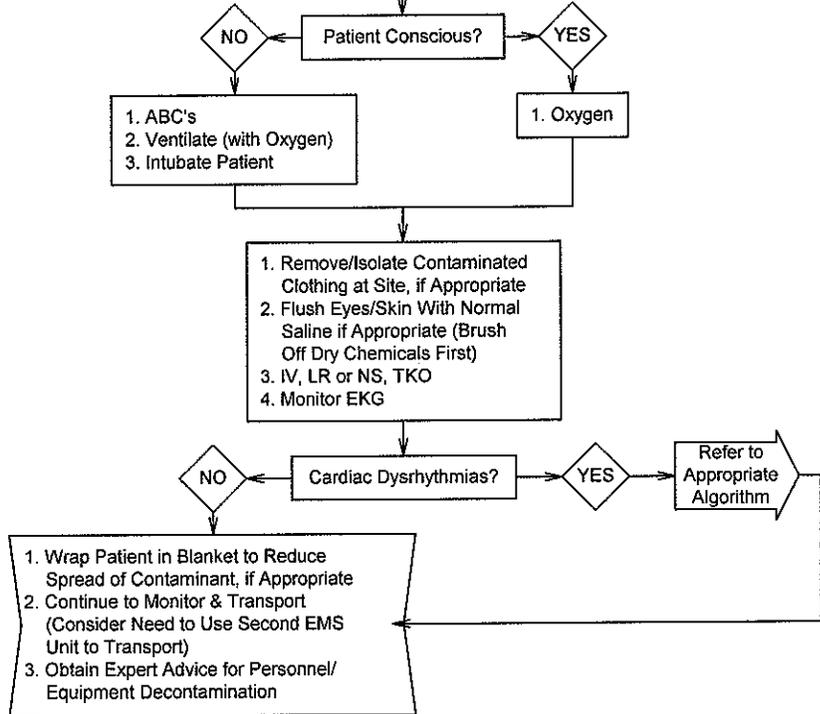
Paramedic



HAZARDOUS/TOXIC MATERIAL EXPOSURE

Paramedic

1. Observe Hazmat Precautions*
2. Do Not Enter Incident Area Without Appropriate Protective Clothing/ Respiratory Equipment
3. Evacuate Patients From Exposure Without Risking EMS Personnel Safety
4. In Cooperation With Police/Fire Authorities, Evacuate/Isolate Scene
5. Attempt to Identify Nature of Hazardous Material as Soon as Possible

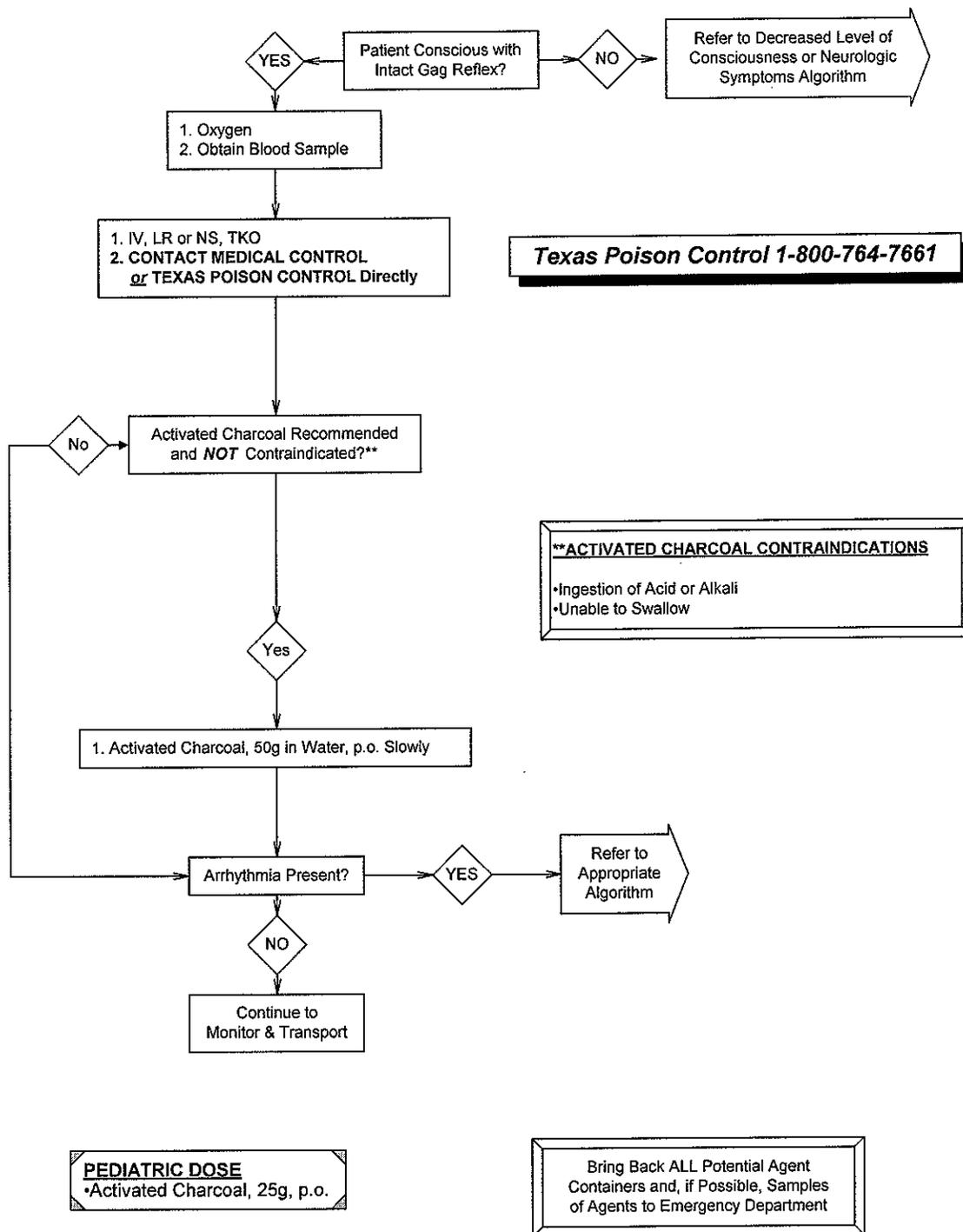


- ### HAZMAT PRECAUTIONS
1. Assume ALL Chemicals Hazardous Until Proven Otherwise
 2. Approach From Upwind
 3. Stay Out of Low-Lying Areas; Stay Uphill if Possible
 4. Do Not Walk Into or Touch Spilled Chemicals;
Wear Gloves When Touching Contaminated Patients
 5. Avoid Smoke, Gasses, Fumes, Vapors
 6. Keep Combustibles Away
 7. Keep Ignition Sources Away

- In Multiple Patient Incidents, Use Triage to Determine Which Patients Receive IV's
- All Patients Should Be Transported for Observation Regardless of how Mild the Episode Seems to be
- Rescue Attempts, Scene Management, & Patient Care Should be Based on Best Information Available about the Material
- Coordinate with Fire Authorities & Regional EMS Communications Center to Obtain Information

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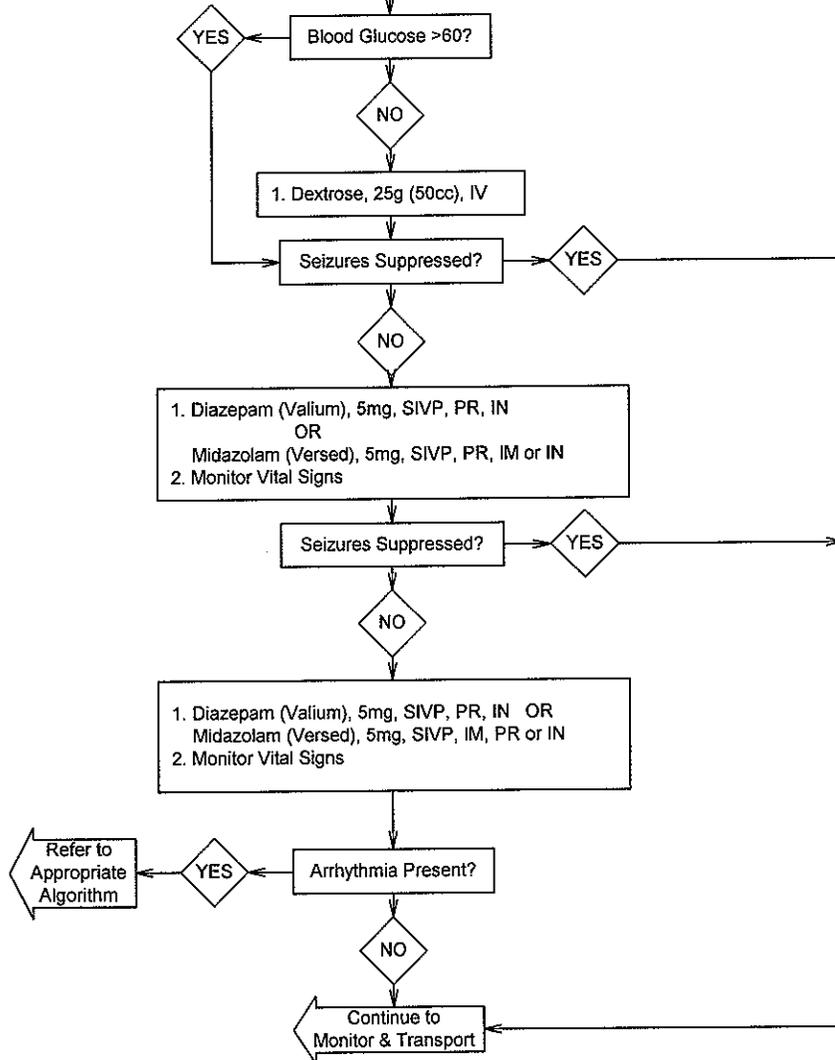
POISONING/OVERDOSE



SEIZURES

Paramedic

1. Remove Patient From Potentially Harmful Environment; Do NOT Forcefully Restrain Patient
2. Secure Airway; Oxygen
3. Assist Ventilations if Respirations Inadequate
4. Monitor EKG
5. Obtain Blood Sample
6. Determine Blood Glucose
7. IV, LR or NS, TKO

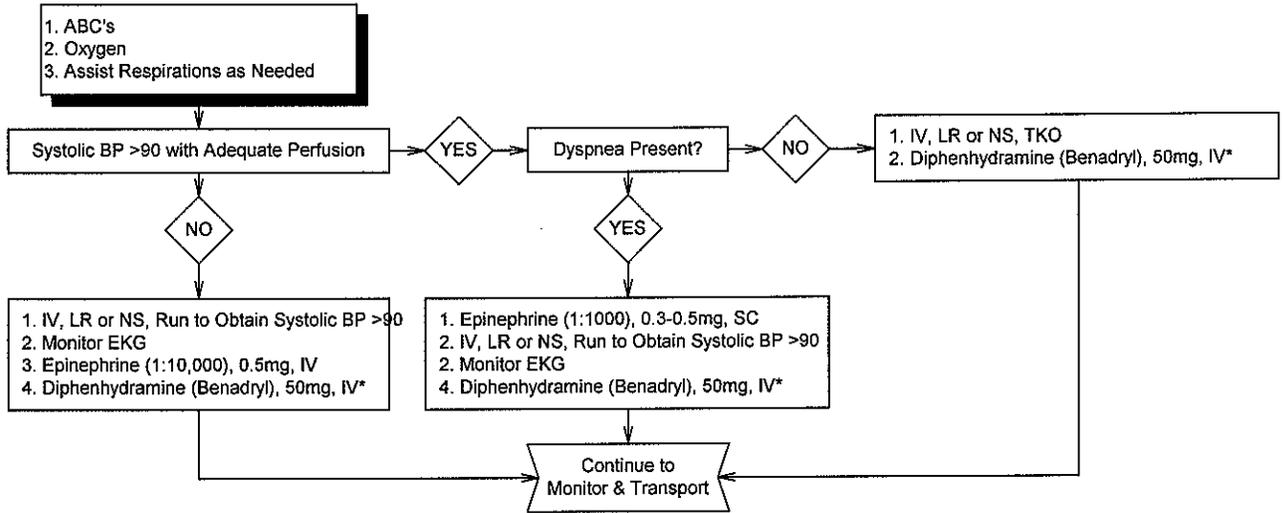


PEDIATRIC DOSE
•Midazolam (Versed), 0.2mg/kg, IV
•Diazepam (Valium), 0.2mg/kg, IV,
•Dextrose 25% (D25W), 2cc/kg, IV

Ativan 4mg (2mg/min) may be used instead of Valium or Versed. Repeat X 1

ALLERGIC REACTION

Paramedic

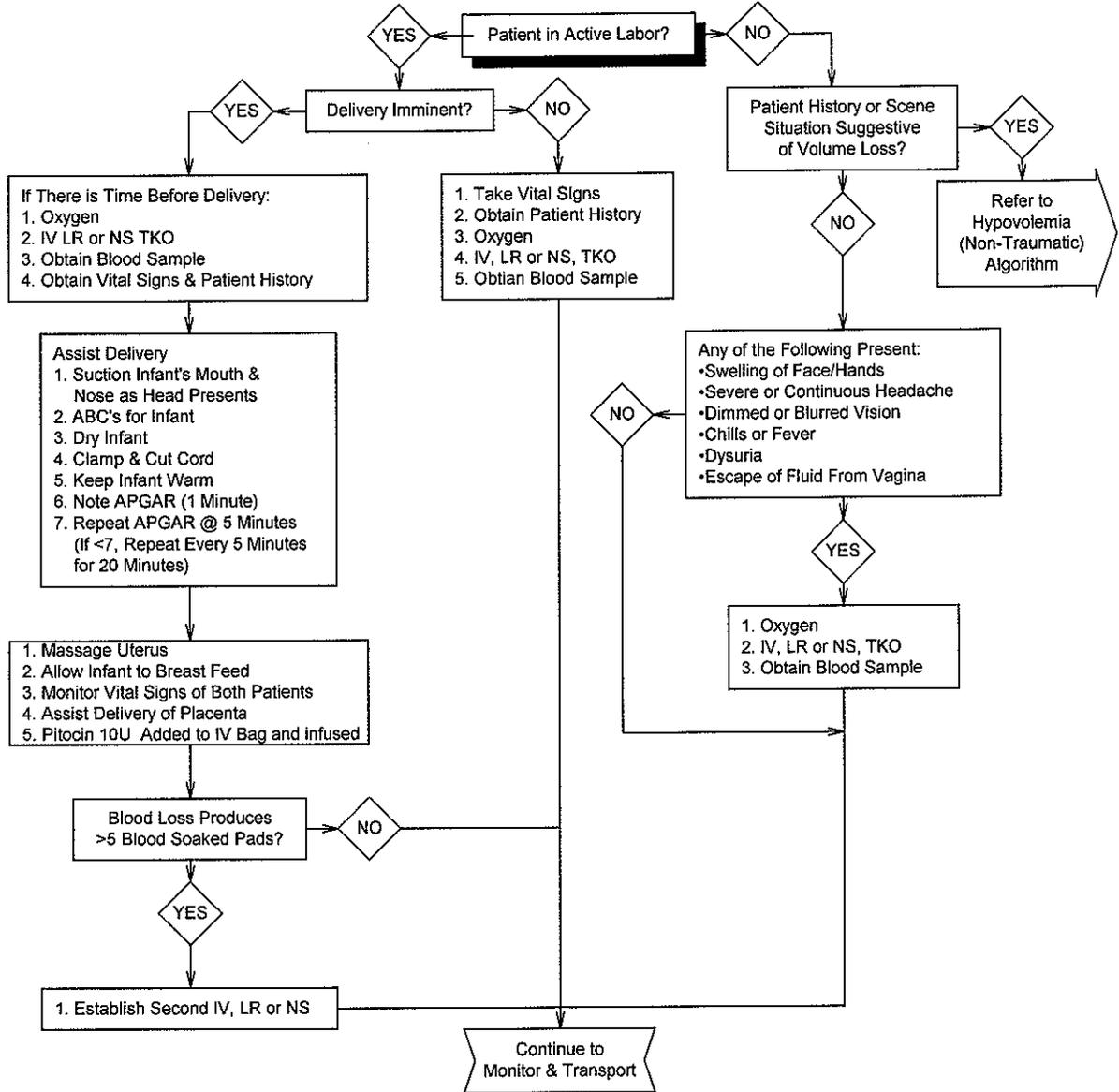


*Diphenhydramine (Benadryl) may be given IM if no IV is available.

PEDIATRIC DOSE
Epinephrine (1:10,000), 0.01mg/kg (0.1cc), IV
•Epinephrine (1:1,000), 0.01mg/kg,
Not to Exceed 0.3mg (0.3cc), SC
•Diphenhydramine (Benadryl), 1.25mg/kg, IV

OBSTETRIC EMERGENCY

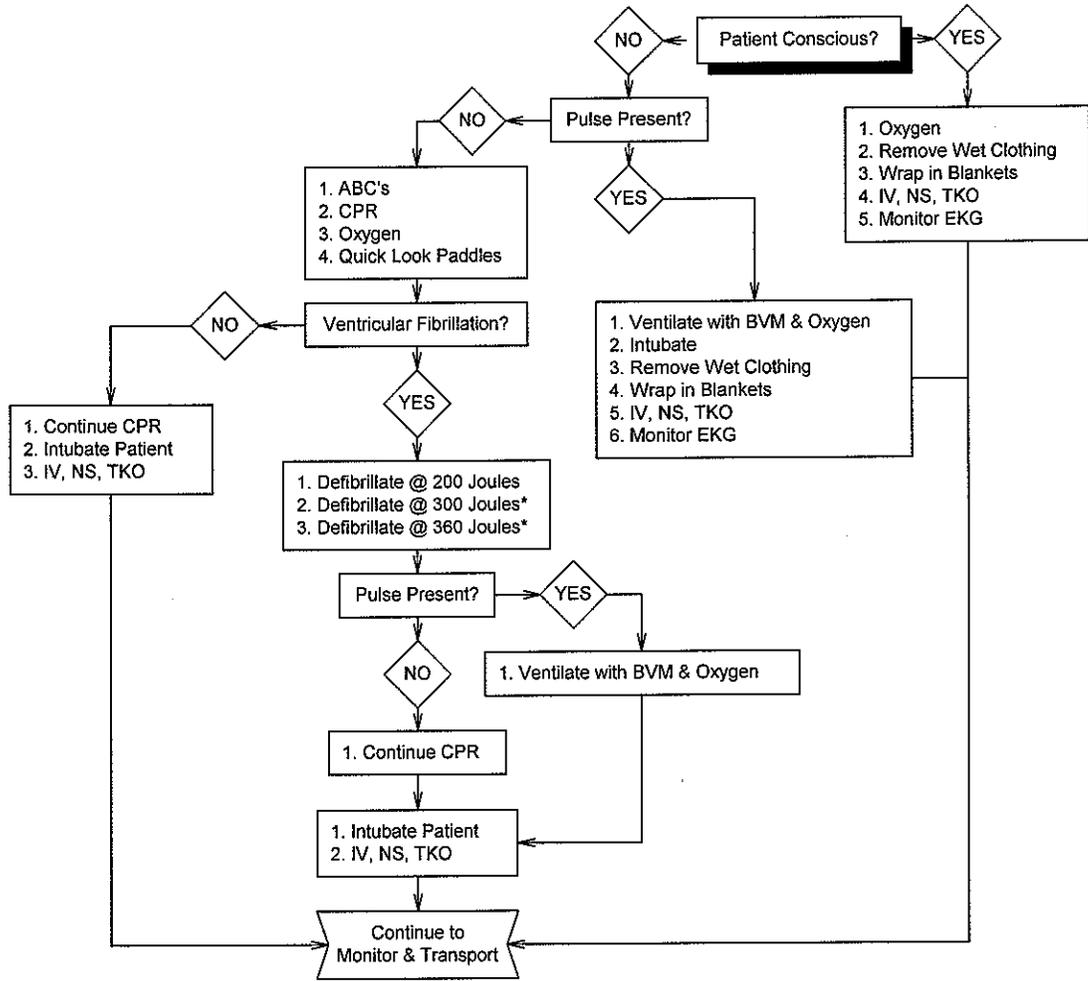
Paramedic



Sign	0 Points	1 Point	2 Points
Appearance	Blue or Pale	Body Pink Extremities Blue	Completely Pink
Pulse Rate	Absent	Below 100	Above 100
Grimace	No Response	Grimaces, or Whimpers	Active Cries
Activity	Absent (Flaccid)	Some Flexion of Extremities	Active Extremity Motion
Respiratory Effort	Absent	Slow and irregular	Strongly Crying

COLD EXPOSURE (SYSTEMIC HYPOTHERMIA)

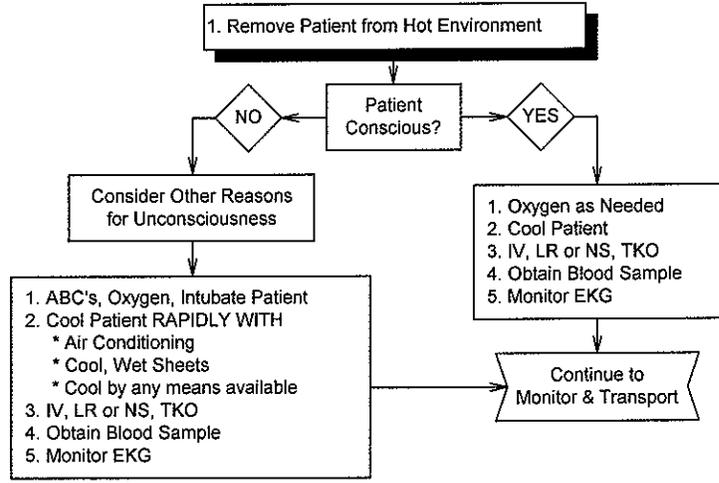
Paramedic



*Repeated Defibrillations are done only if there is NO Rhythm Change.

- Suspect Hypothermia in any Patient with An Altered Level of Consciousness in a Cool Environment
- Move ALL Patients Gently, to Avoid Serious Arrhythmias
- Do Not Actively Rewarm Patient in Prehospital Environment
- Avoid Extensive Advanced Life Support in Prehospital Environment
- Resuscitate ALL Cardiac Arrest Patients who are Hypothermic

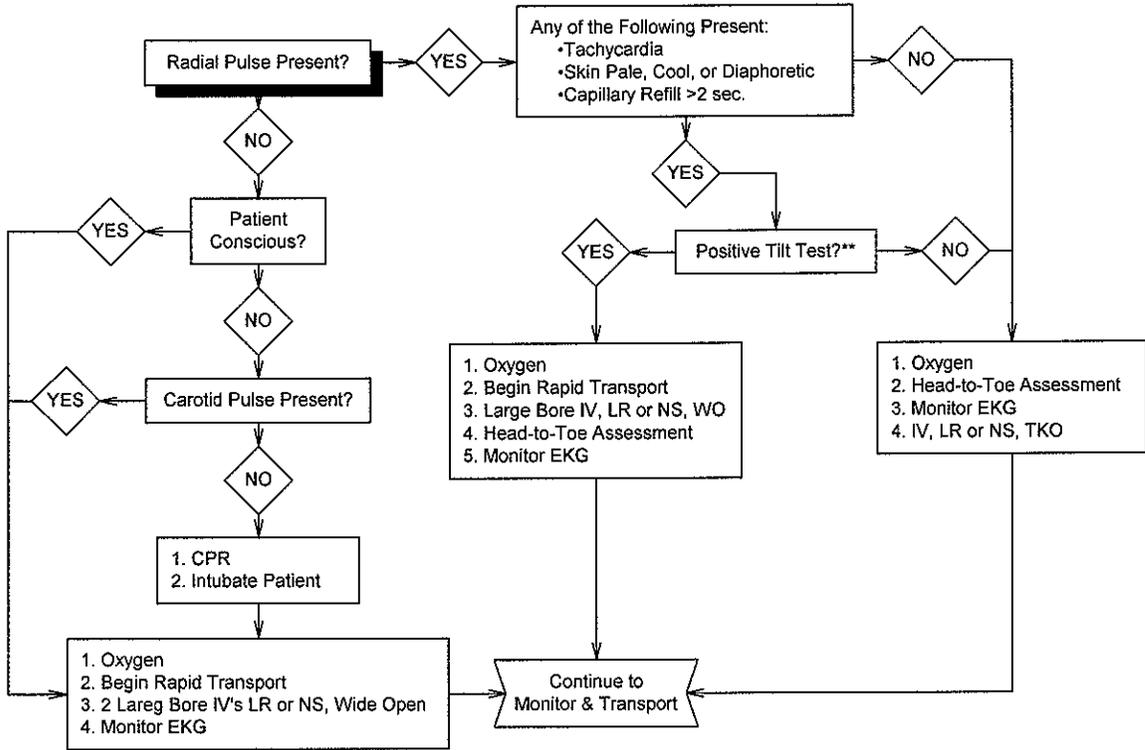
HEAT EXPOSURE (HEAT STROKE)



Suspect Heat Stroke in any Patient with an Altered Level of Consciousness in a Hot Environment

HYPOVOLEMIA* (NON-TRAUMATIC)

Paramedic



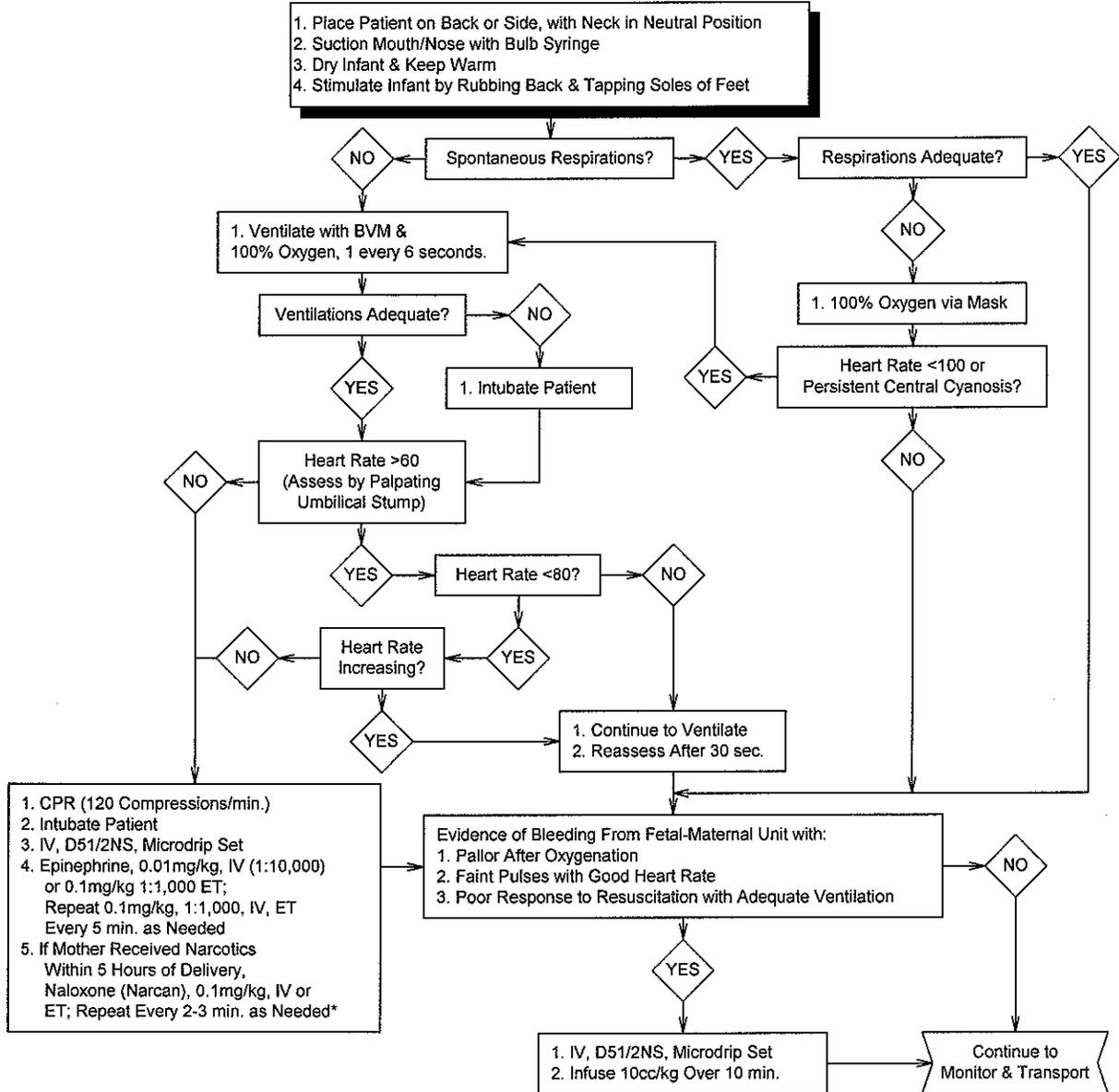
*Includes History of Vomiting, Diarrhea, Bloody or Dark Stool, Abdominal Pain, or Possible Diabetic Hyperglycemic State

****POSITIVE TILT TEST**
Pulse Rate Increases by 20 or Systolic BP Decreases by 20 or Diastolic Decreases by 10 when Patient is Raised from Supine to Sitting position OR Patient will Not Tolerate Being Raised From Supine to Sitting Position Because of Weakness, Dizziness, Presyncope, or Syncope.

PEDIATRIC DOSE
•LR 20cc/kg, Over 5 min., Repeated Until Clinical Signs of Adequate Perfusion.

NEONATAL RESUSCITATION

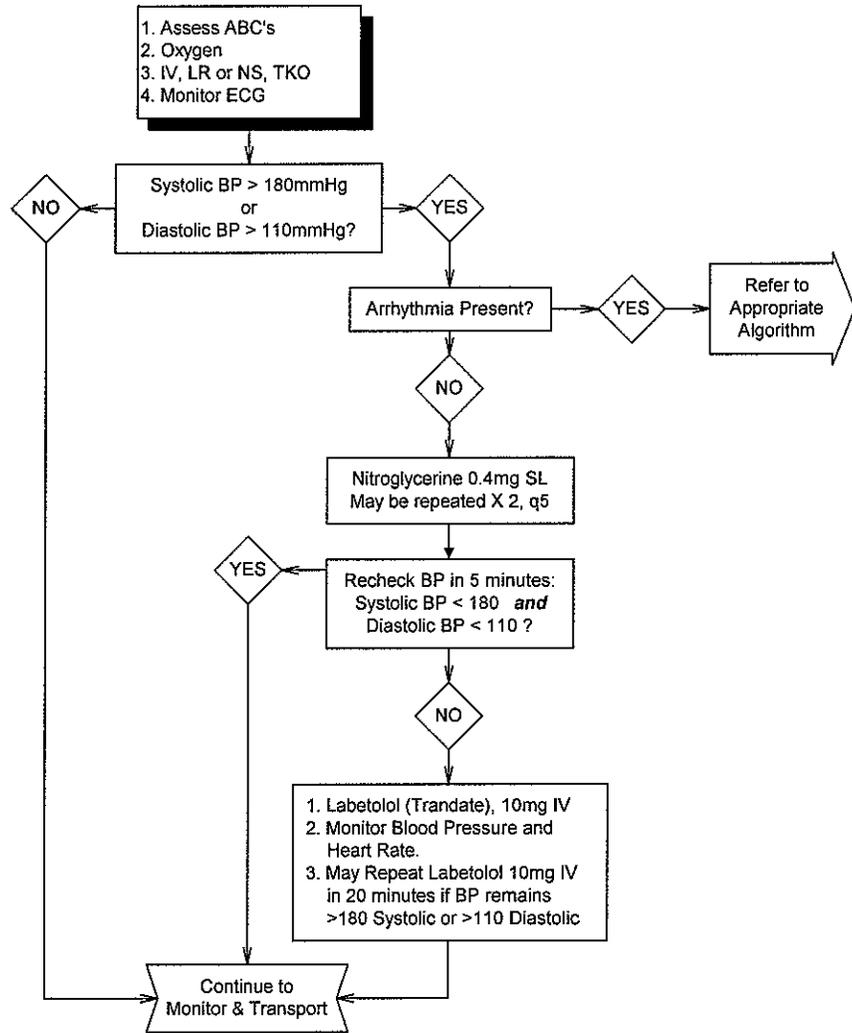
Paramedic



*Naloxone (Narcan) Should be Avoided if
Mother is Suspected of Being Narcotic Dependent

Hypertension (Malignant or non-Malignant)

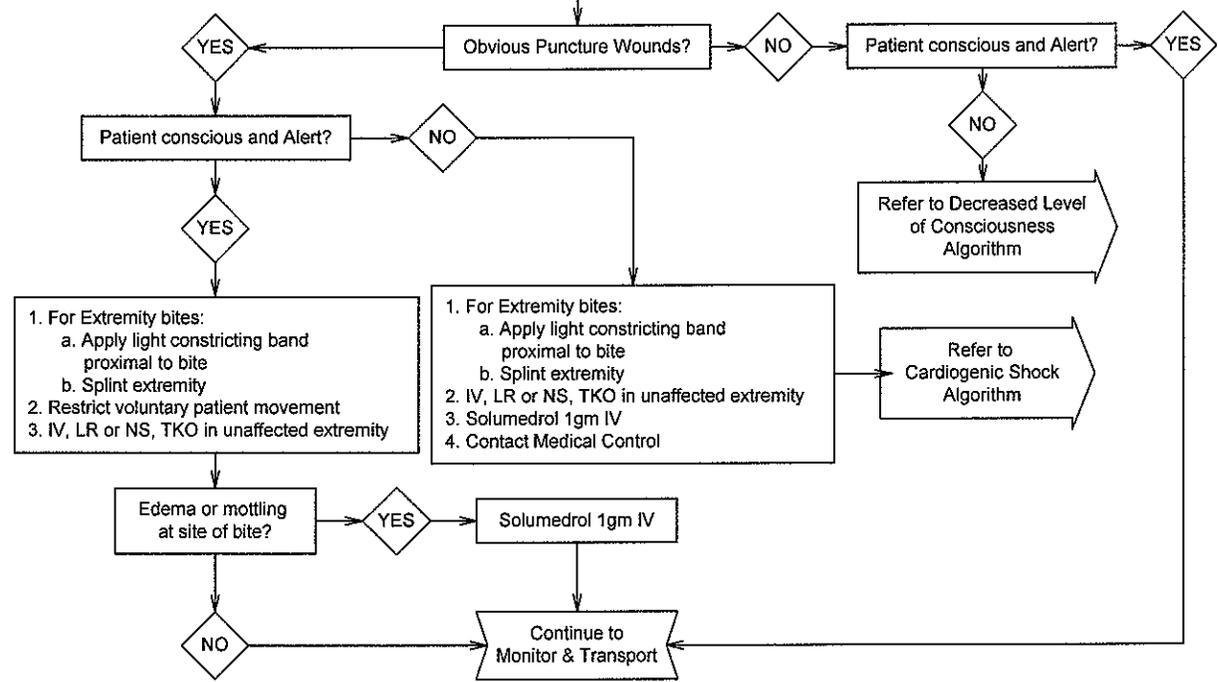
Paramedic



Paramedic

Snake Bite or Suspected Snake Bite

1. Remove patient from danger. Assume venomous snake until proven otherwise.
2. Assess ABC's
3. Oxygen
4. Monitor ECG
5. Do not transport a live snake
6. Do not spend excessive time in search for snake, but bring snake if possible for identification.

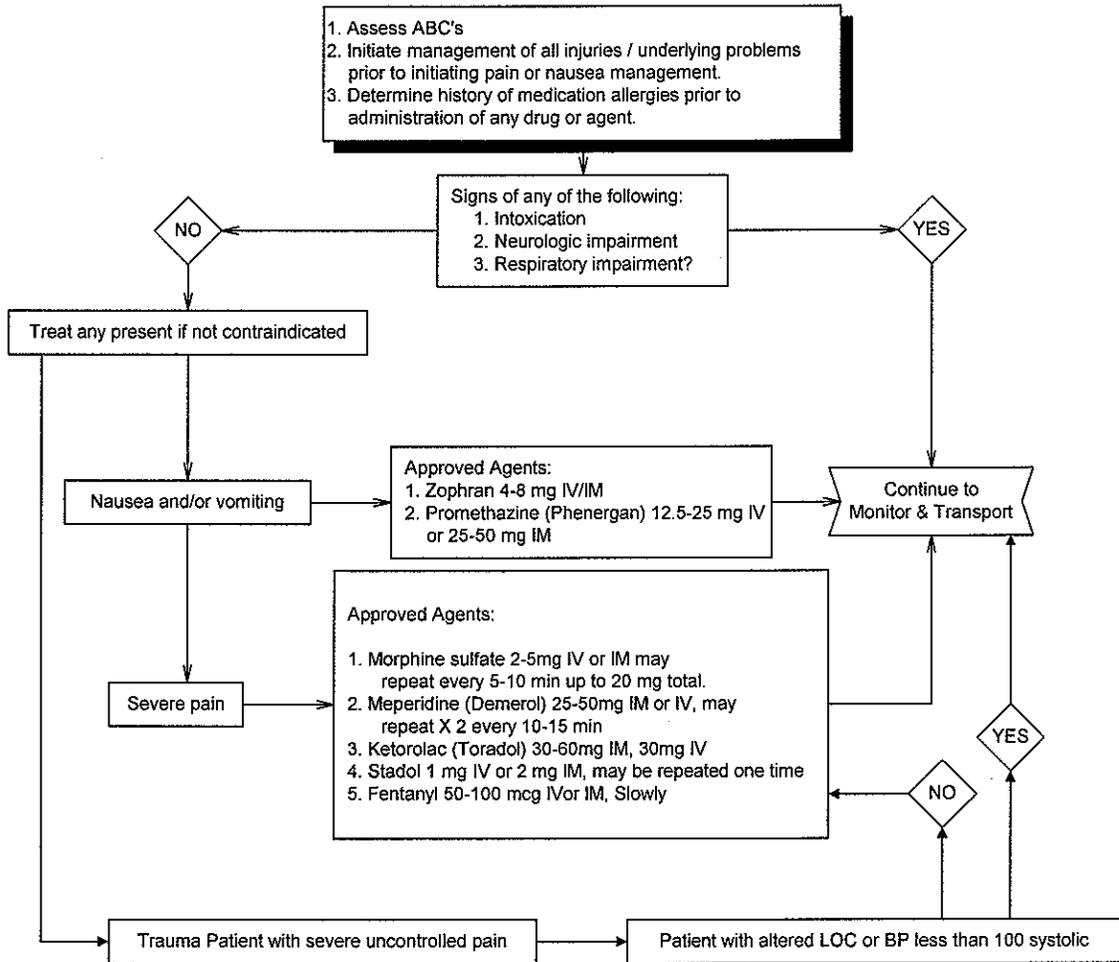


As part of the patient history, determine any allergies to horses or horse serum.

Question regarding previous doses of antivenin

Pain Management Nausea Management

Paramedic

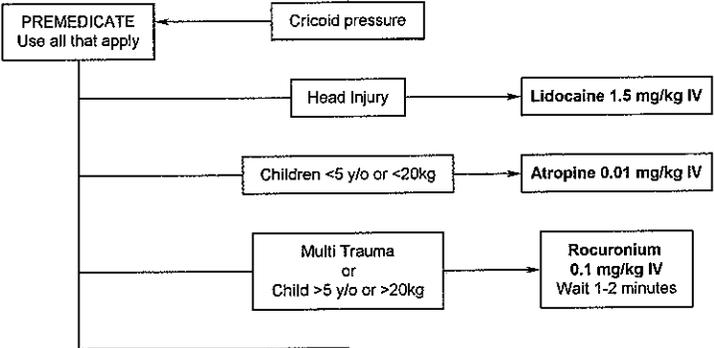


Rapid Sequence Intubation (RSI)

1. Severe Head Injury / Trauma Requiring a Secure Airway?
2. Status asthmaticus / Respiratory Distress with Intubation Indicated?
3. Status Epilepticus with Severe Posturing and Intubation otherwise unobtainable?
4. Combative / Violent Patient Jeopardizing Airway, C-Spine, or Medical Personnel and Sedation is ineffective.

1. Maintain Cervical Spine Control
2. Preoxygenate with 100% Oxygen (2-5 Minutes)
3. Prepare by having all medications and equipment available prior to initiating RSI
4. Cardiac Monitor & Pulse Oximetry
5. IV of LR or NS X 2, TKO

KETAMINE 2 MG/KG - less likely to cause hypotension
ETOMIDATE .0.3-0.6 mg/kg - caution for adrenal insufficiency
VERSED 5 mg IVP
 Children 0.15 mg/kg
 Maintenance Dose 10-60 mcg/kg/hour



Succinylcholine (Anectine) 1.5mg/kg IV
 Onset 45-60 Seconds
 May Repeat x 1 if needed.

Intubate, Confirm PLacement, and
 Secure Endotracheal Tube

**Rocuronium 1 mg/kg IV, duration of action
 40-60 minutes.**

Continue to
 Monitor & Transport

PREMEDICATION NOTES

1. **Lidocaine IV** may minimize the increases in ICP Associated with **succinylcholine**.
2. **Atropine** may avert potentially severe brady arrhythmias associated with **succinylcholine**.
3. Subparalytic priming dosages of **Rocuronium (10% of paralytic dose)** may prevent muscle fasciculations produced by **succinylcholine**, especially useful in children/adolescents or in cases of long-bone fractures or multi-trauma.

BOWIE FIRE DEPARTMENT
EMS DIVISION

ANXIETY

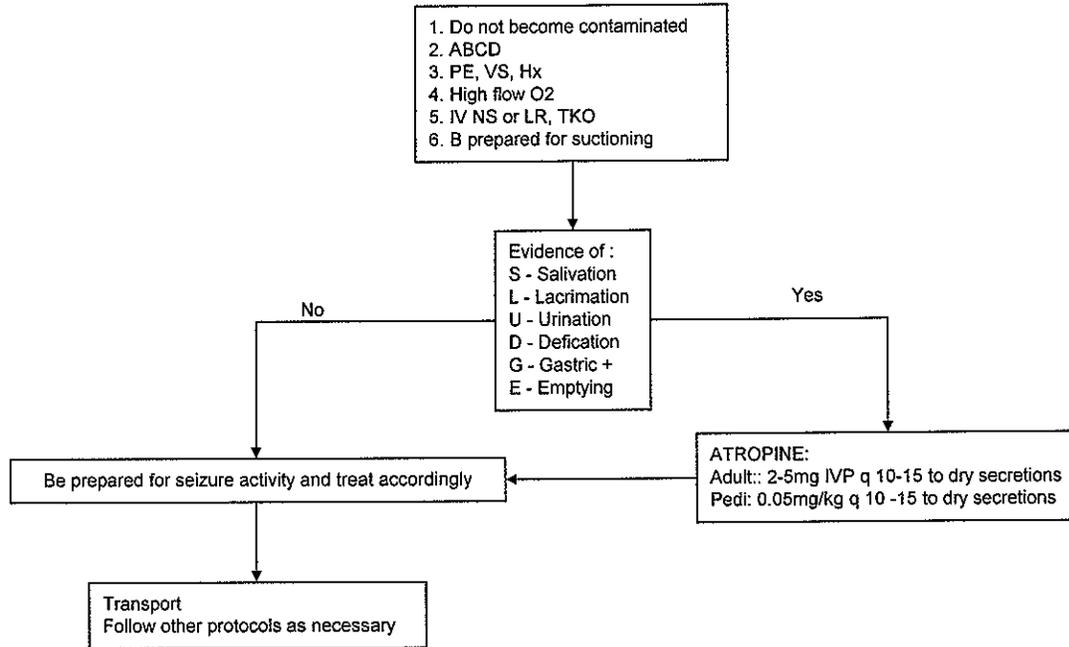
Paramedic

1. ABC's
2. PE, VS, Hx

1. Calm and reassure the patient
2. Consider IV of LR or NS
3. Valium IV in 2 mg increments to desired effect. 10 mg Max.
4. Valium IM 5 mg, repeat x 1 after 5 minutes.
5. Ativan 1.0 mg IVP up to 4 mg.

TRAUMA PATIENTS WITH EXTREME ANXIETY
Etomidate 0.3 mg/kg Slow IVP

Organo-Phosphate Poisoning



Paramedic

Tricyclic Antidepressant Overdose

1. ABCD
2. PE, VS, Hx
3. High flow O2
4. IV NS or LR, TKO
5. B prepared for suctioning

Sodium Bicarbonate 1 mEq/kg IVP
followed by 0.5 mEq/kg q 10 minutes

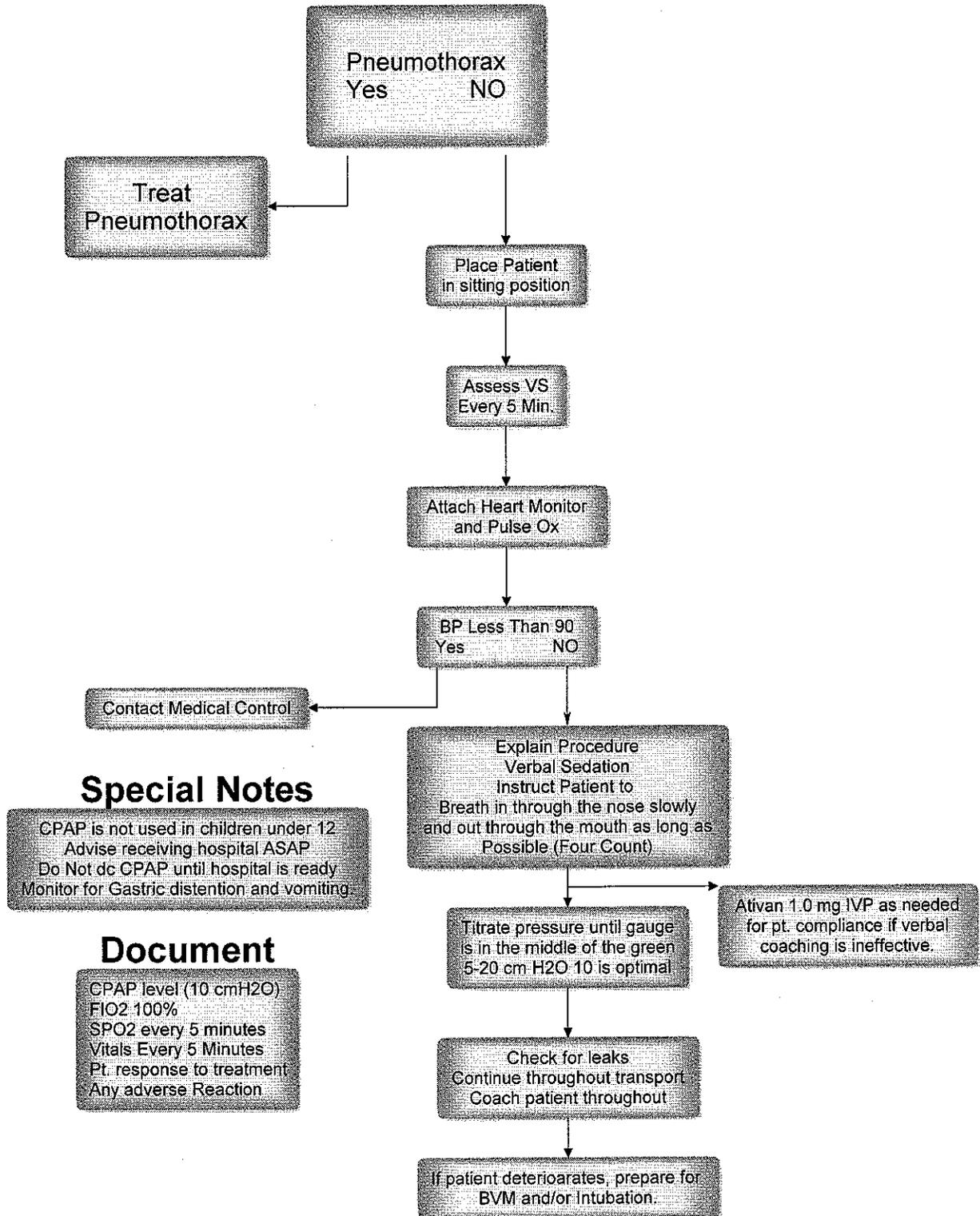
Be prepared for seizure activity and treat accordingly

Transport
Follow other protocols as necessary

Tricyclics:
Elavil Triavil
Norpramin Doxepin
Asendin Pamelor
Sinequan Tofranil
Amatriptolin

CPAP

Paramedic



Special Notes

CPAP is not used in children under 12
Advise receiving hospital ASAP
Do Not do CPAP until hospital is ready
Monitor for Gastric distention and vomiting

Document

CPAP level (10 cmH2O)
FIO2: 100%
SPO2 every 5 minutes
Vitals Every 5 Minutes
Pt. response to treatment
Any adverse Reaction

Effective 07/01/2016
Expires 07/31/2018

**BOWIE FIRE DEPARTMENT
EMS DIVISION**

EMT
EMT-I
EMT-P

