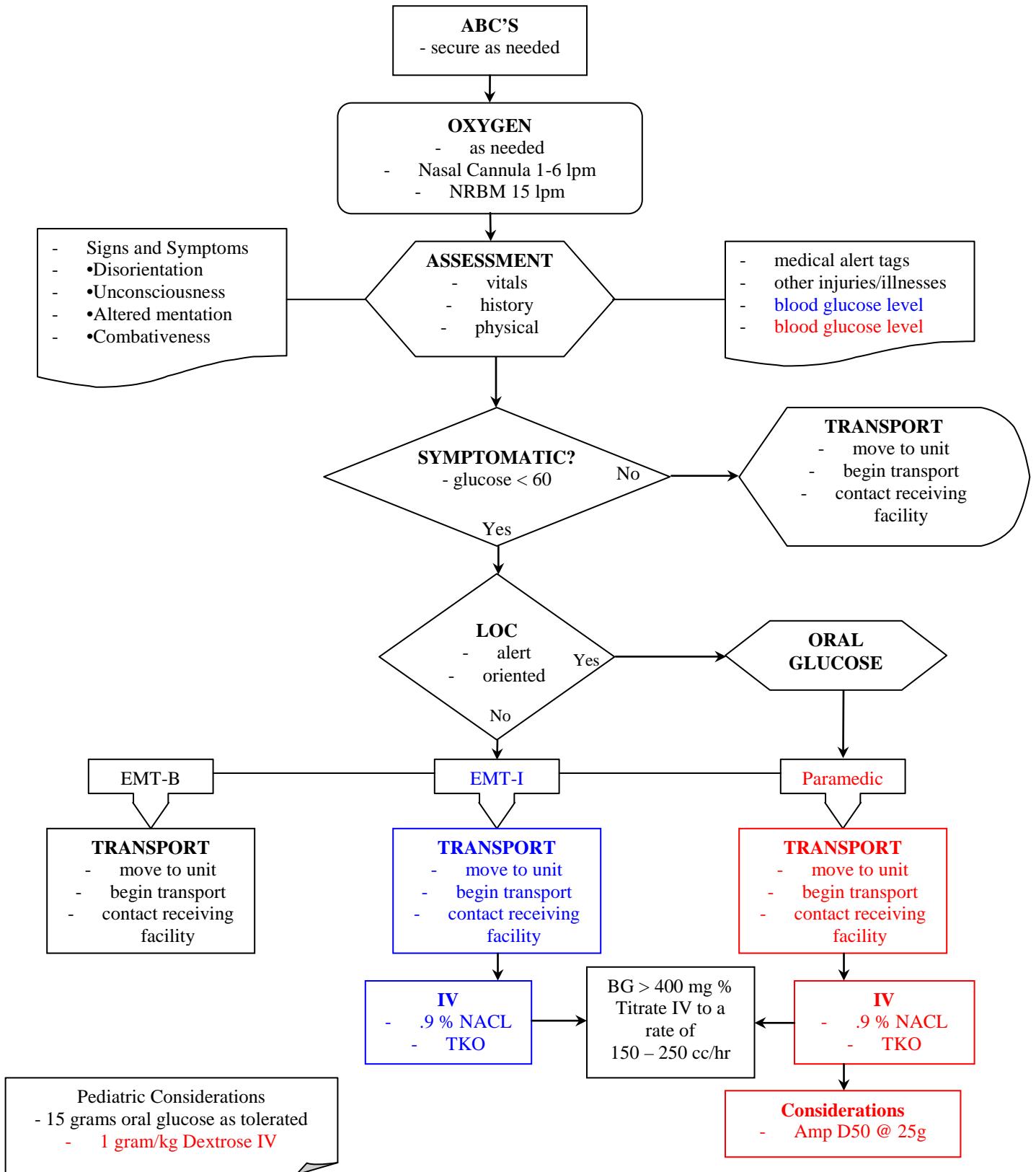
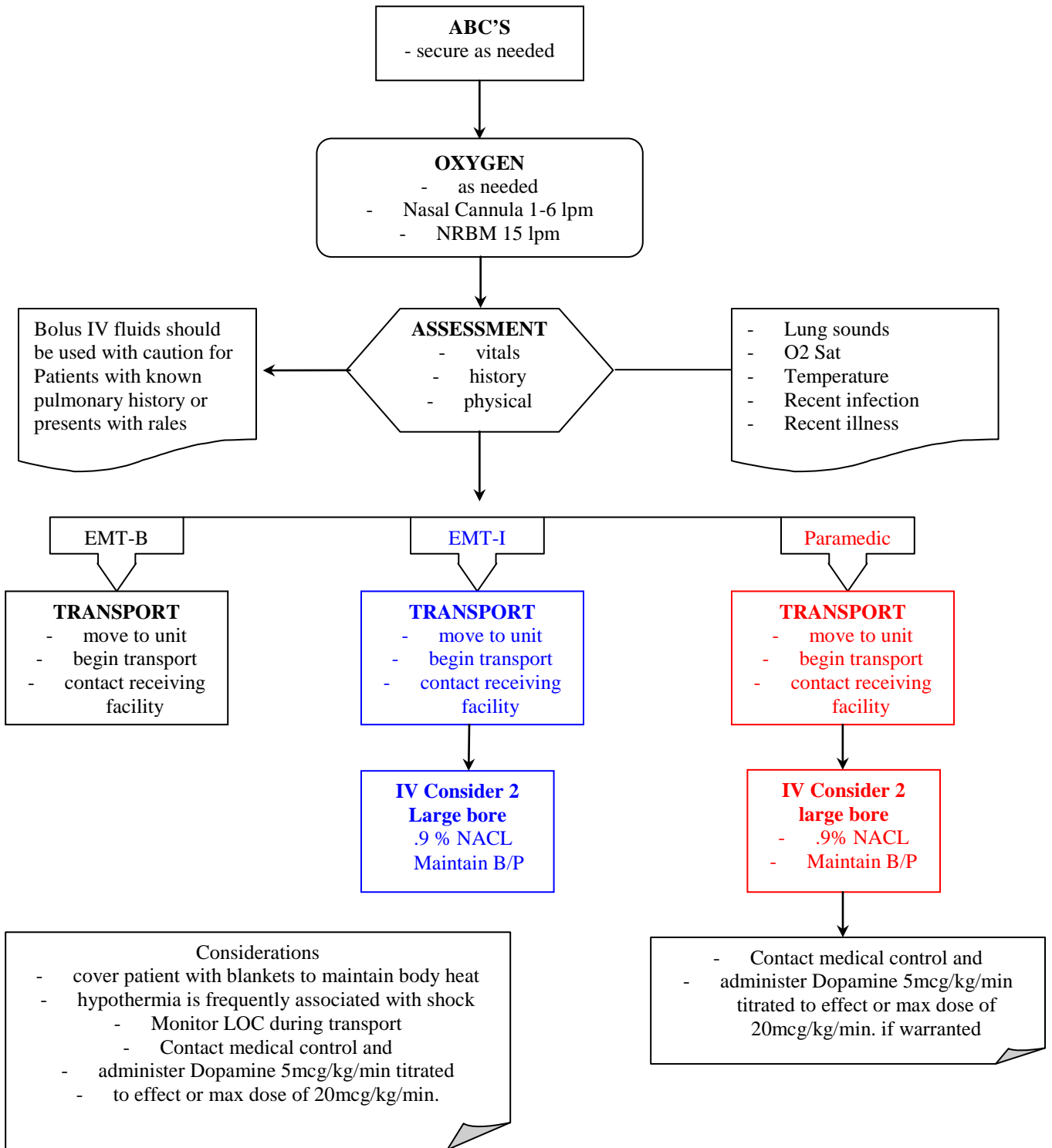


# Diabetic Emergencies



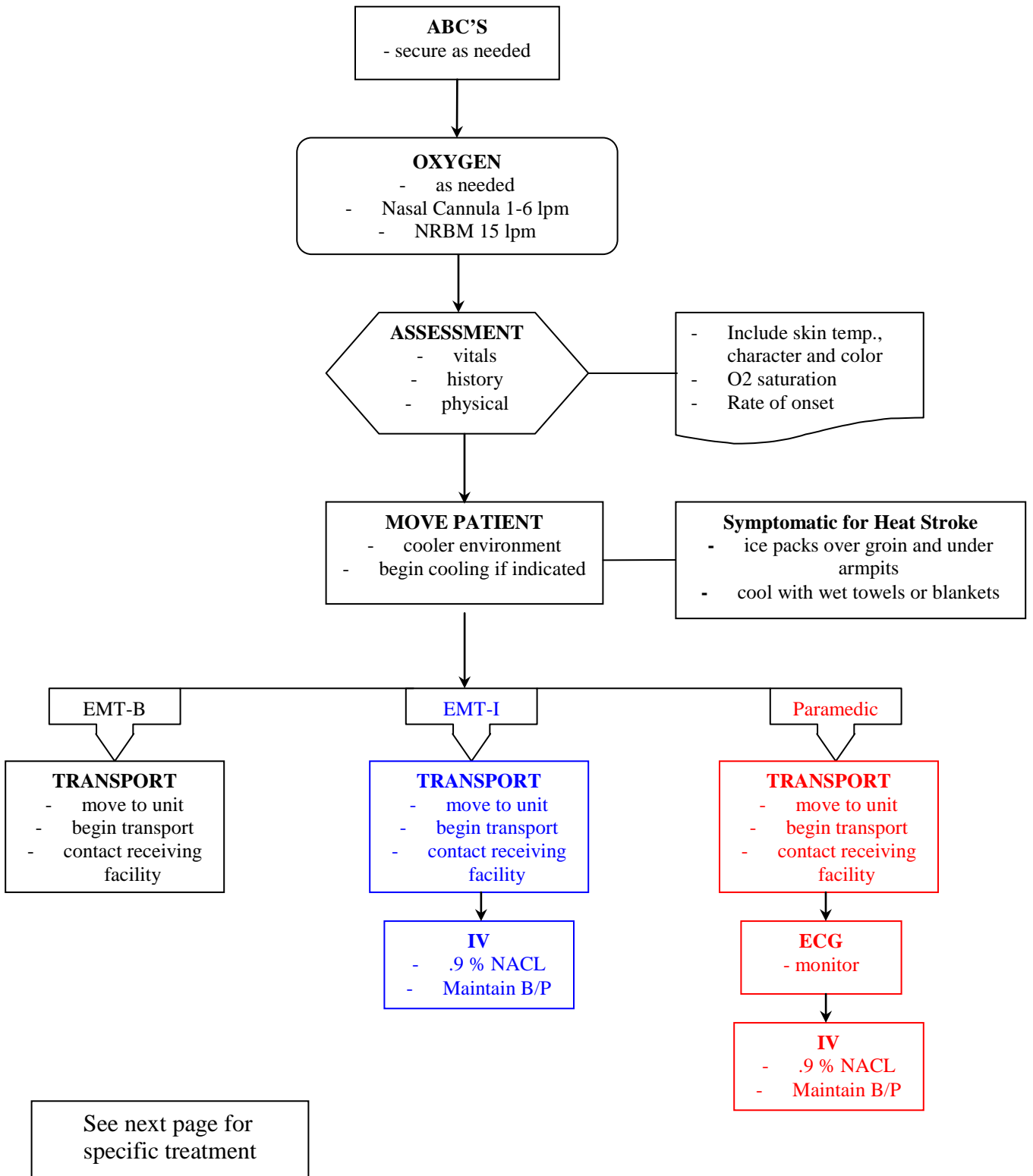
This form supersedes no other

# Shock



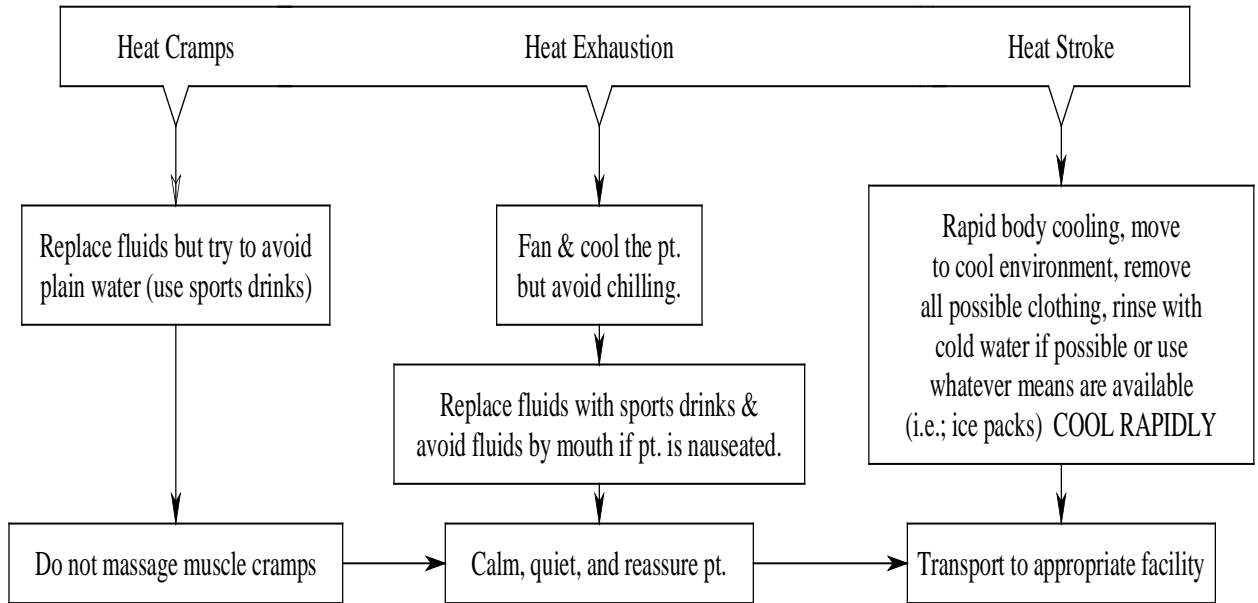
This form supersedes no other

# Hyperthermia



This form supersedes no other

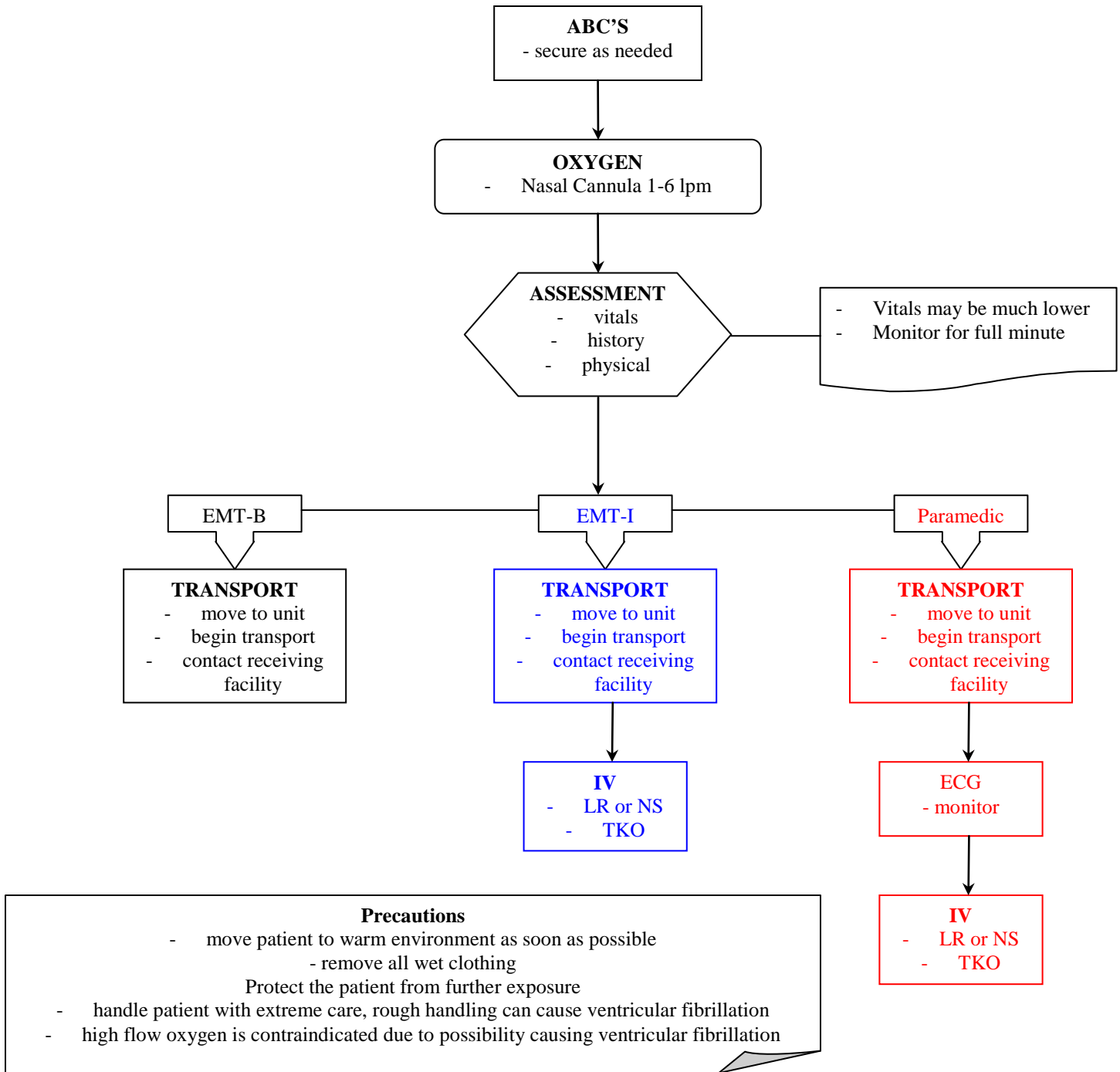
Specific types of Heat Injury Management (in addition to the above)



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090801

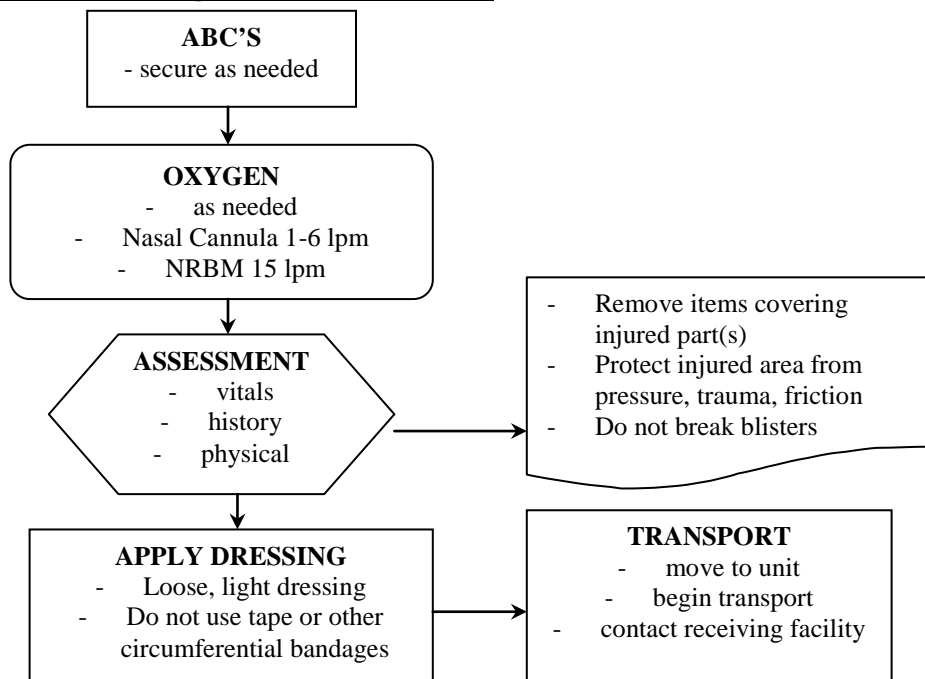
# Hypothermia



See next page for localized injury

This form supersedes no other

## Local Cooling and Frostbite



### Mild HYPOTHERMIA

Core temperature 93-97 degrees fahrenheit active external rewarming

Asses the pt. for presence or absence of pulse or respirations

Core Temp less than 97 degrees fahrenheit indicates hypothermia

Treat the pt. very gently. Rough handling can precipitate ventricular fibrillation.

### MODERATE HYPOTHERMIA

Core temperature 86-97 degrees fahrenheit active rewarming of truncal areas only

ABC's  
-secure as needed

Assesment

OXYGEN as needed  
-Nasal Cannula 1-6 lpm  
-Non Rebreather Mask 10-15 lpm

### SEVERE HYPOTHERMIA

Core temperature less than 86 degrees fahrenheit  
-active internal rewarming  
•warm IV fluids (109° F)  
•warm, humid oxygen

-blood pressure  
-respirations  
-pulse  
-pupils  
-neuro function  
-skin (core temperature)

If possible, oxygen & IV fluids should be heated. If possible, obtain core temperature.

Prevent further heat loss. Insulate from the ground, protect from the wind, eliminate evaporate heat loss by removing wet clothing or by covering pt. with vapor barrier (such as a plastic bag), cover the head & neck. Move the pt. to a warm environment.

This form supersedes no other

# Chest Pain

**ABC'S**  
- secure as needed

**OXYGEN**  
- Nasal Cannula 1-6 lpm  
- NRBM 15 lpm

**ASSESSMENT**  
- vitals  
- history  
- physical

- Note pt. allergies  
- Does pt. take Nitro?  
- Does pt. take Aspirin daily  
- O2 Saturation  
- Is the patient on ED medication?

**EMT-B**

**EMT-I**

**Paramedic**

**TRANSPORT**  
- move to unit  
- begin transport  
- contact receiving facility

**TRANSPORT**  
- move to unit  
- begin transport  
- contact receiving facility

**ASPIRIN**  
- 325 mg P.O.  
- chew tablets

- check allergy  
- If pt. takes daily, check with provider

**AED**  
- 3 lead  
- obtain strip(s) for E.R.

**AED**  
- 3 lead  
- obtain strip(s) for E.R.

**NITRO**  
- B/P > 100 systolic  
- 0.4 mg SL  
- repeat X 2 every 5 min. if needed

**TRANSPORT**  
- move to unit  
- begin transport  
- contact receiving facility

**ECG**  
- monitor

**IV**  
- .9 % NACL  
- TKO

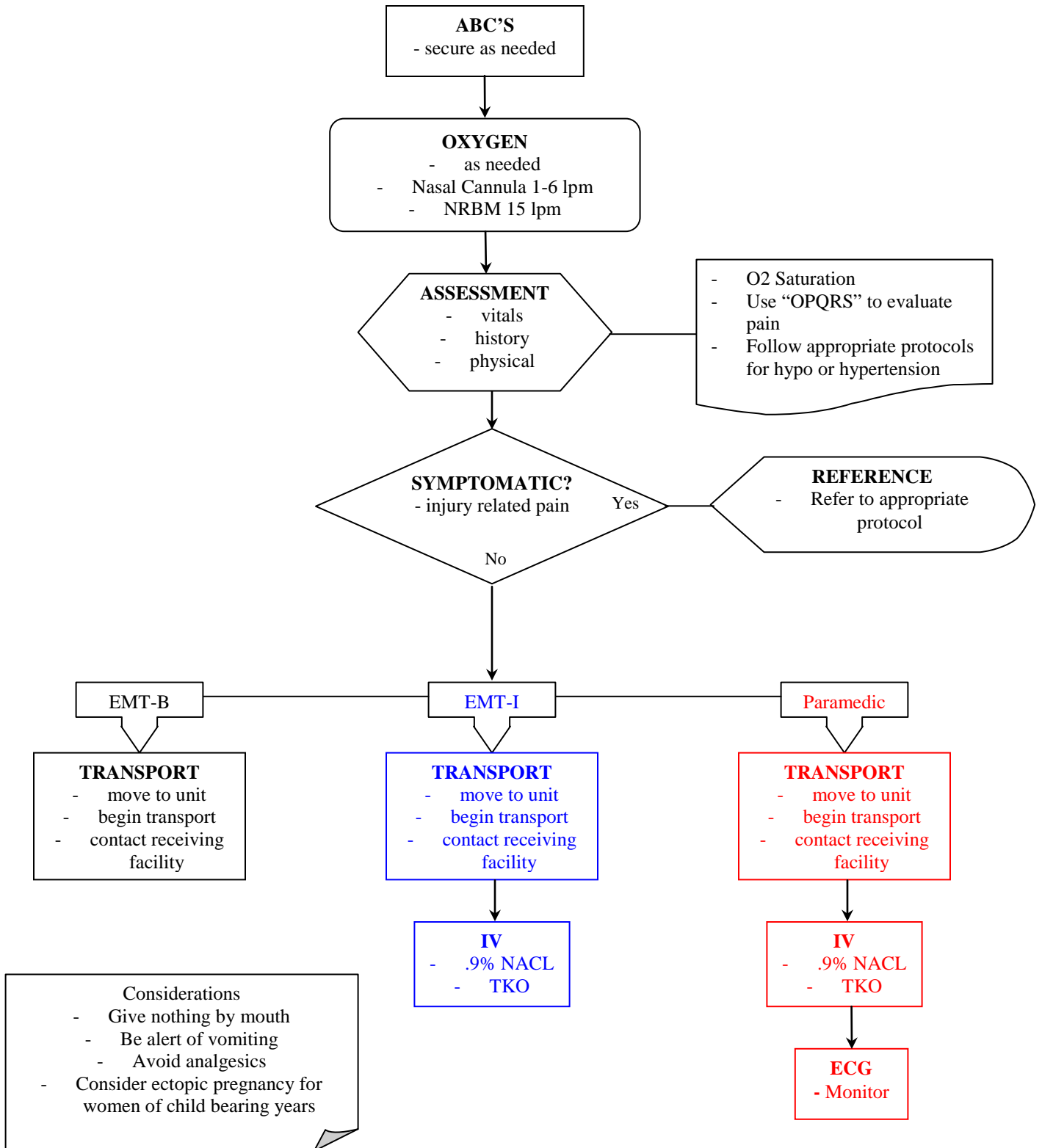
**ACLS**  
- contact medical direction for approval  
- initiate current ACLS Guidelines

**EMT – B and EMT – I Considerations**  
- Assist patient with personal nitro  
- B/P must be > 100 systolic  
- Repeat in 5 min. if needed, not to exceed three total

**PARAMEDIC CONSIDERATIONS**  
- Atropine 0.5 mg IV bolus per ACLS Guidelines for bradycardia  
- PEA per ACLS Guidelines for V-Fib, pulseless V-Tach, or Asystole  
- Morphine Sulfate 1-3 mg every 3-5 mins titrated to effect or systolic BP less than 100mmHg

This form supersedes no other

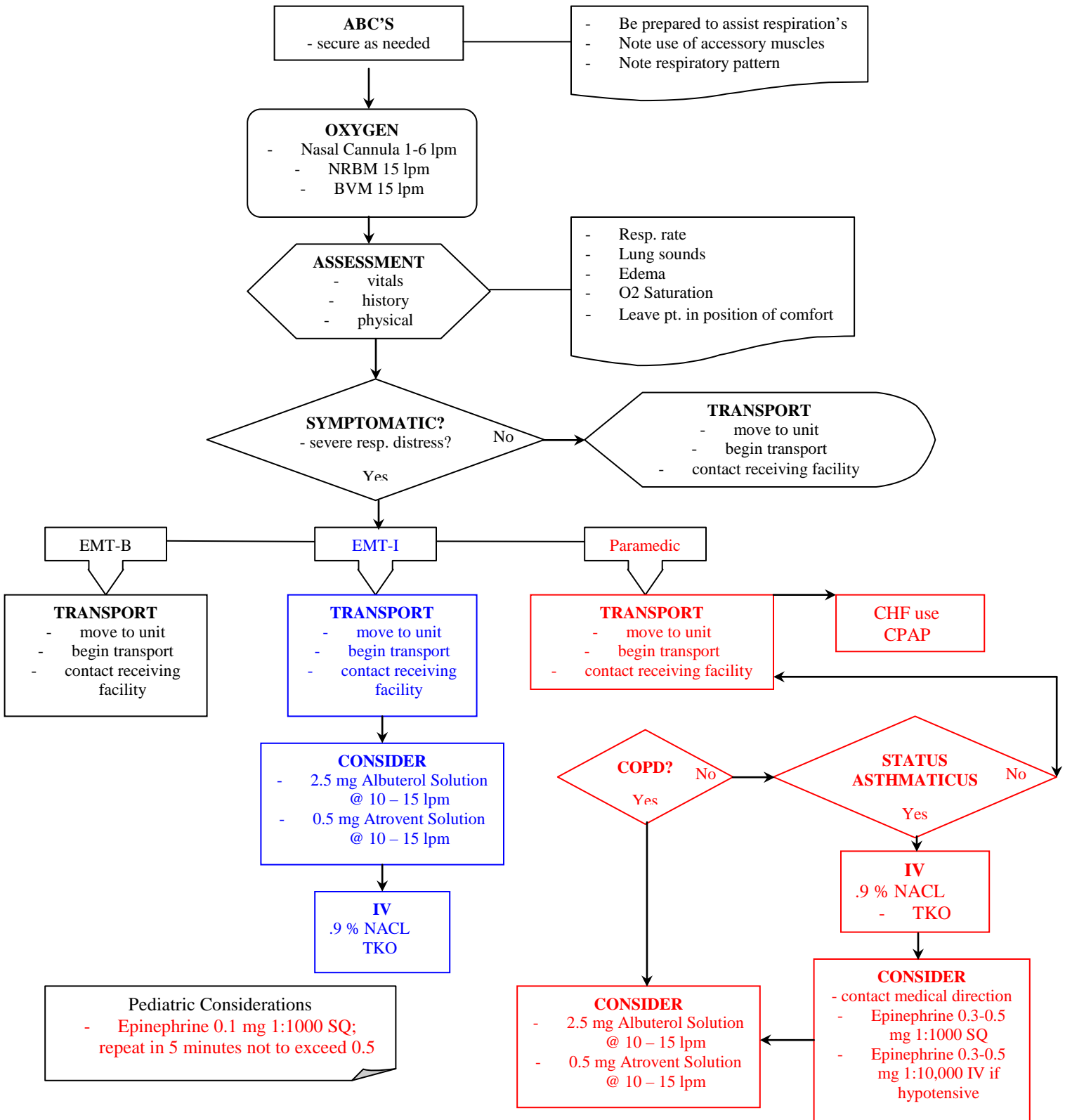
# Abdominal Pain



This form supersedes no other



# Respiratory Distress / Dyspnea



This form supersedes no other

# Obstetrical Emergencies Childbirth

**ABC'S**  
- secure as needed

**OXYGEN**  
- as needed  
- Nasal Cannula 1-6 lpm  
- NRBM 15 lpm

**ASSESSMENT**  
- vitals  
- history  
- physical

- chronic illness
- # of pregnancies
- prenatal care?
- baby's expected birth date
- last menstrual cycle

**MONITOR CONTRACTIONS**

- time
- frequency
- duration
- strength

Prolapsed cord or presenting parts should be transported immediately

**ASSESS PERINEAUM**

- bleeding
- prolapsed cord
- bulging or crowning
- presenting parts

**IS BIRTH IMMINENT?**  
No  
Yes

**TRANSPORT**  
- move to unit  
- begin transport  
- contact receiving facility

**REMOVE UNWANTED BYSTANDERS and PREPARE for DELIVERY**

**GO TO NEXT PAGE**

**Signs of Imminent Delivery**

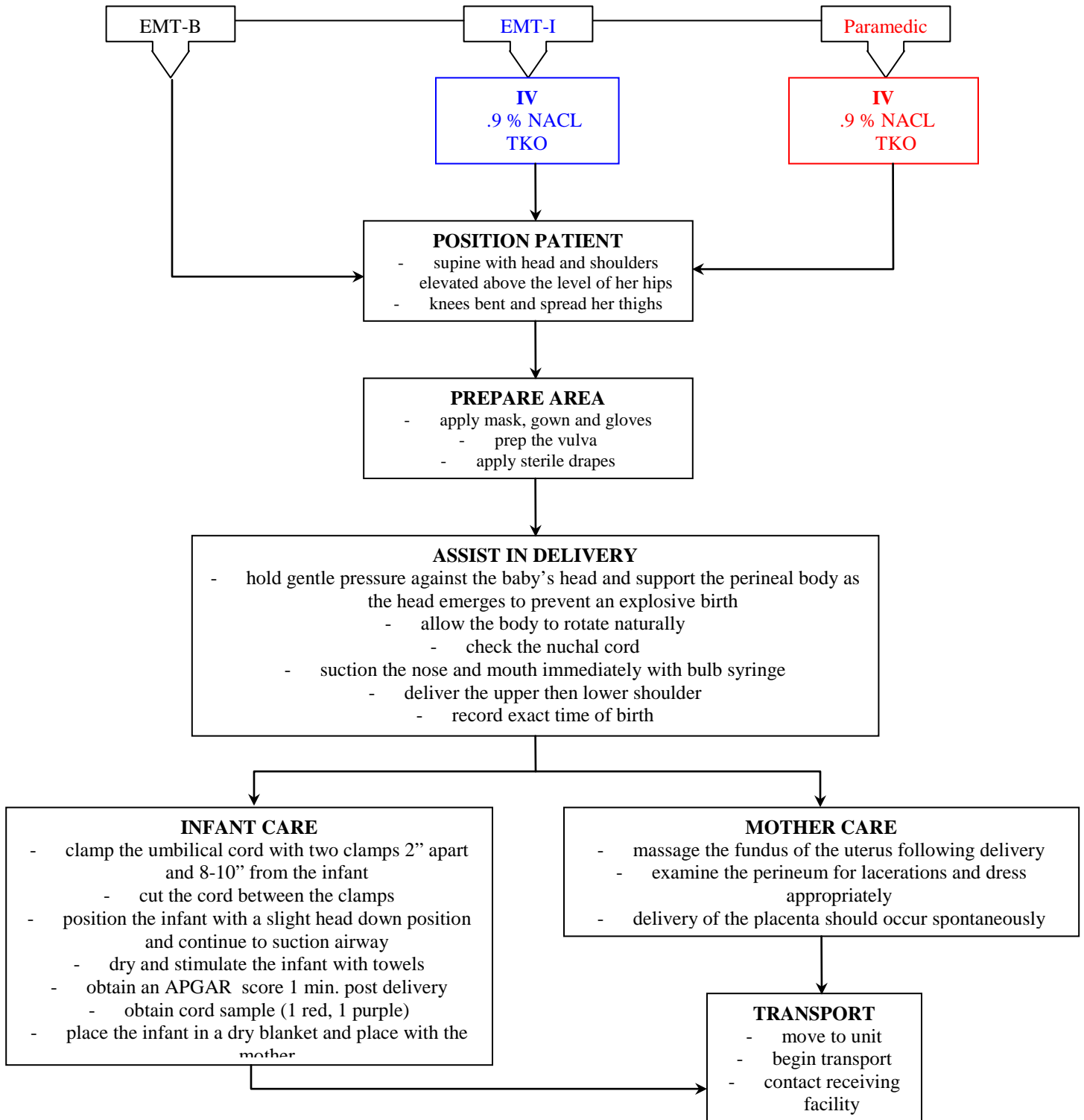
- effectual contractions which are less than 2 min. apart and lasting 30-60 sec.
- perineal bulging or crowning with contractions

**Precautions**

- even a small amount of blood during labor should be reported to medical facility
- elevation of B/P in the mother above 160/90 should be reported to the medical facility

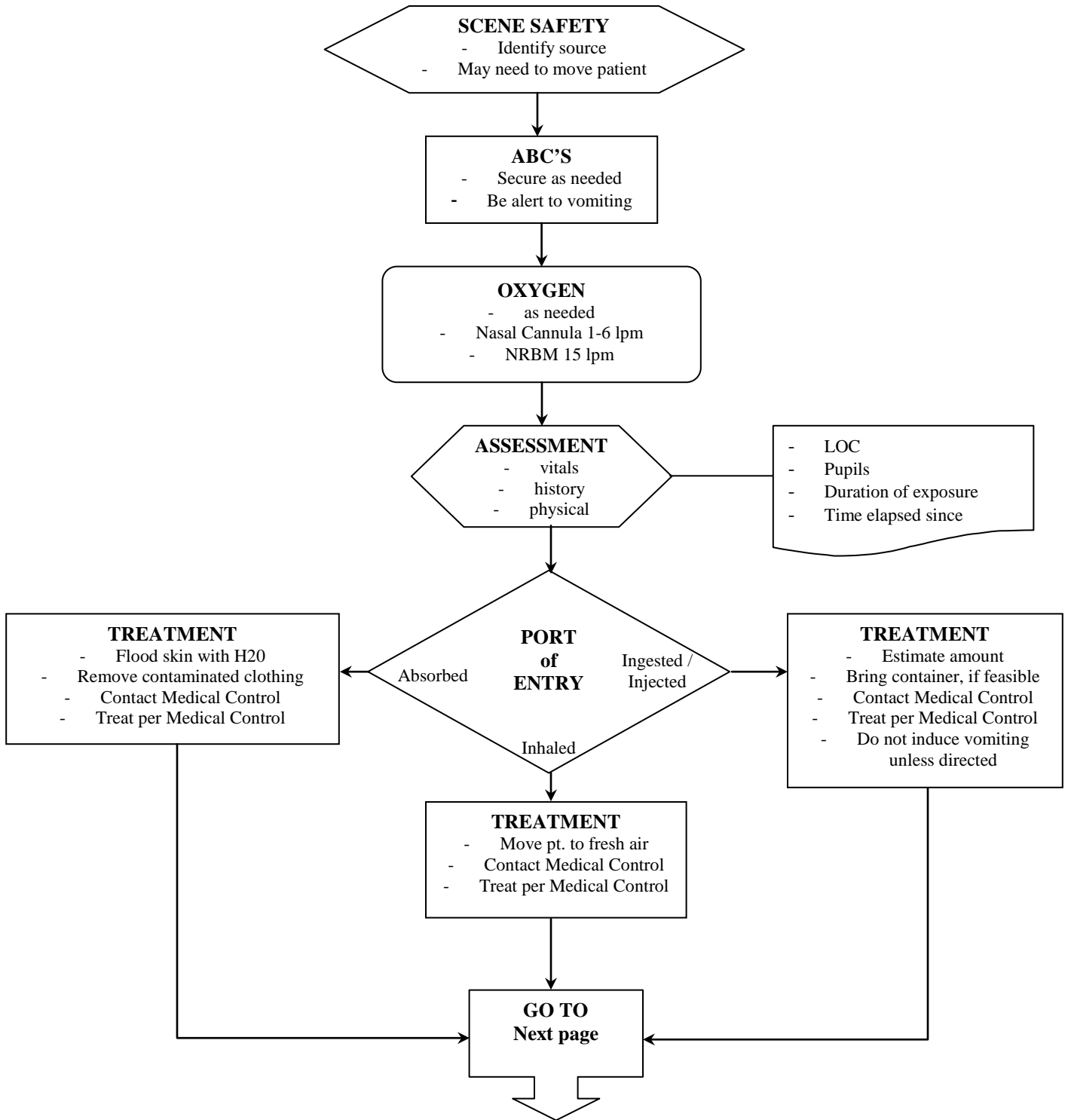
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# Obstetrical Emergencies Childbirth

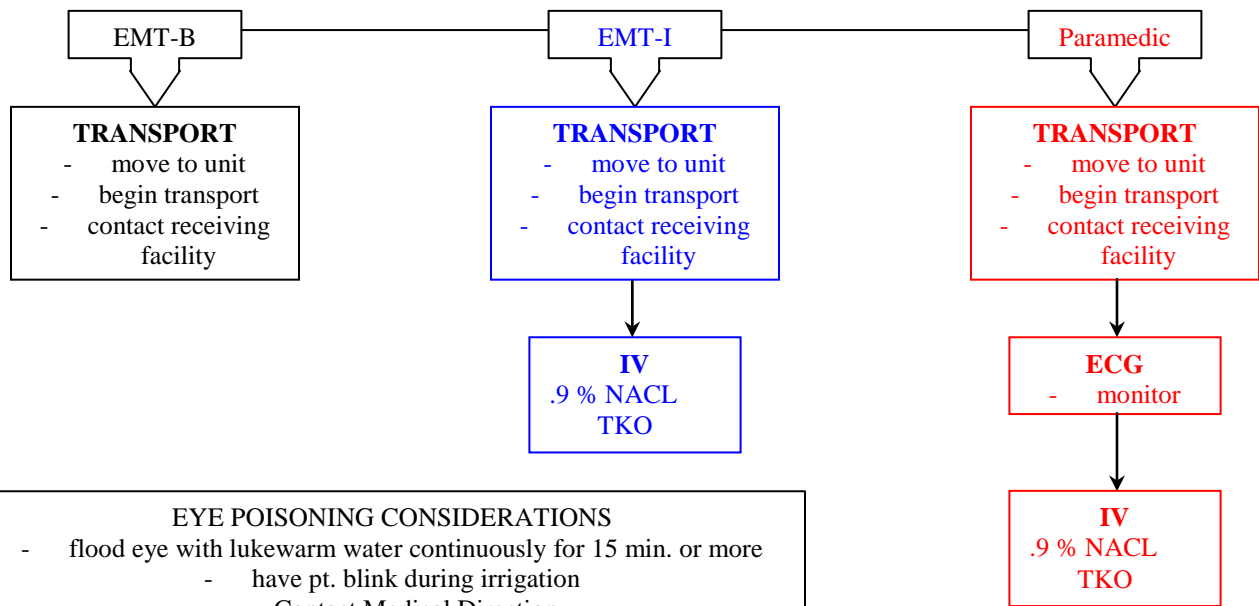


This form supersedes no other

# Poisoning and Substance Abuse



This Form supersedes no other



**EYE POISONING CONSIDERATIONS**

- flood eye with lukewarm water continuously for 15 min. or more
  - have pt. blink during irrigation
  - Contact Medical Direction
- Cover BOTH eyes with moist sterile dressing

Consider possible causes and treat cause

Hypovolemia

- Drug overdose such as tricyclics, digitalis
- beta-blockers, calcium channel blockers
- Hyperkalemia
- Metabolic Acidosis
- Respiratory Acidosis
- Hypoxia
- Cardiac Tamponade
- Tension pneumothorax
- Hypothermia
- Massive pulmonary embolism

# Seizures

**ABC'S**  
- secure as needed

**PROTECT PATIENT**  
- Protect from injury  
- Do not use restraints  
- Protect from onlookers and embarrassment as much as possible

**OXYGEN**  
- Nasal Cannula 1-6 lpm  
- NRBM 15 lpm

**ASSESSMENT**  
- vitals  
- history  
- physical

- O2 Saturation
- Previous seizures?
- Recent trauma – see Trauma protocol
- Temp.
- Blood glucose level
- Blood glucose level

**EMT-B**

**TRANSPORT**  
- move to unit  
- begin transport  
- contact receiving facility

**EMT-I**

**TRANSPORT**  
- move to unit  
- begin transport  
- contact receiving facility

**IV**  
.9 % NACL  
TKO

**Paramedic**

**TRANSPORT**  
- move to unit  
- begin transport  
- contact receiving facility

**ECG**  
- monitor

**IV**  
.9 % NACL  
TKO

Pts actively seizing administer  
Valium 5 – 10 mg IV or 1 – 5 of Vesed  
Versed 5 – 10 mg IM if no IV established

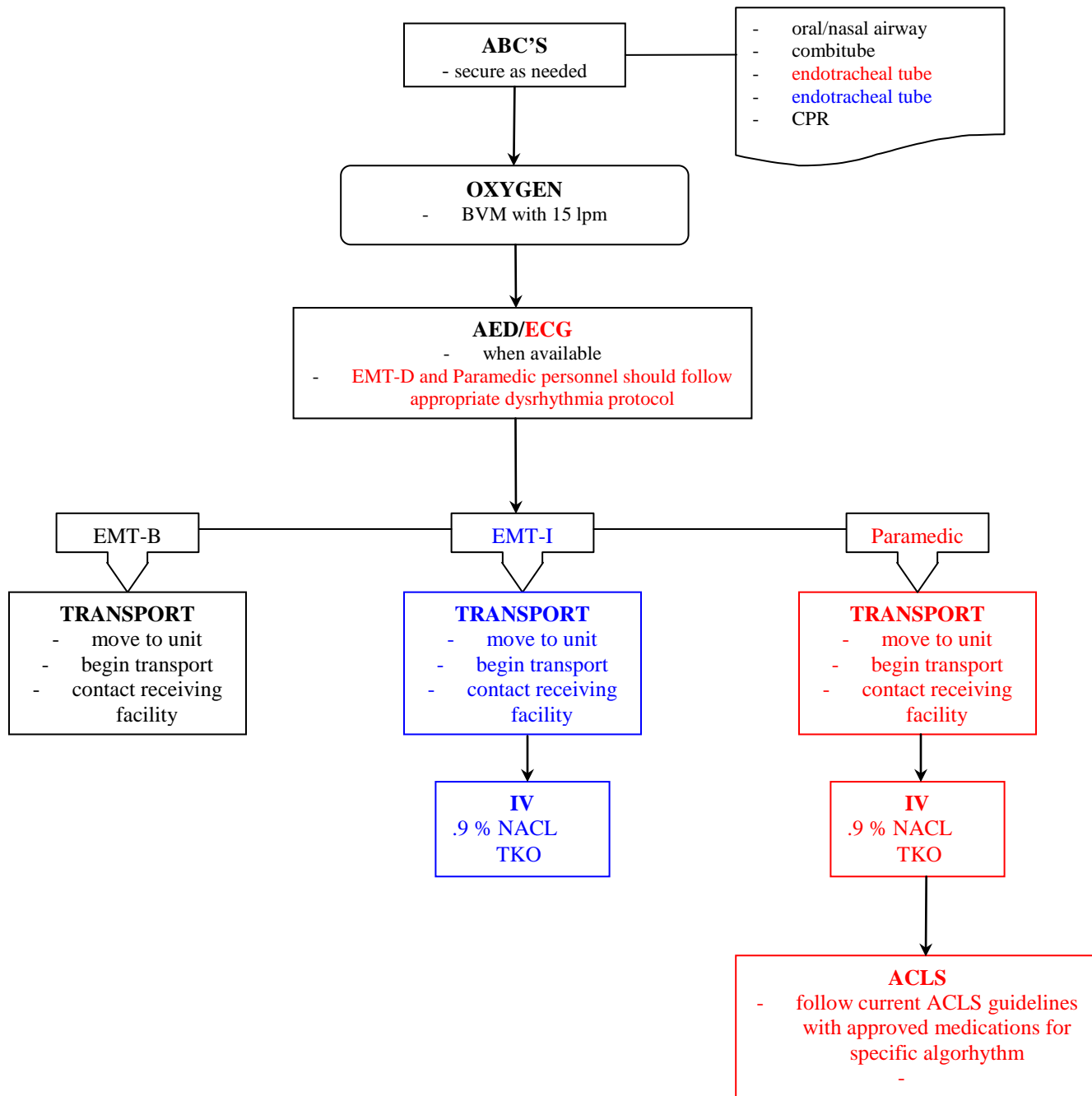
**CONSIDERATIONS**  
- Transport pt. in a quiet, non-stimulating environment. Flashing lights and/or sirens may precipitate additional seizures.

**PARAMEDIC and EMT-I CONSIDERATIONS**  
- blood sugar < 60, treat per Diabetic Emergencies Protocol

This form supersedes no other

# Cardiac Arrest – Code Blue

## Overview



This form supersedes no other

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090801

# Burns

**STOP BURNING PROCESS**

- remove victim from burning source
- remove necessary clothing
- do not remove stuck clothing

**ABC'S**

- secure as needed

**OXYGEN**

- as needed
- Nasal Cannula 1-6 lpm
- NRBM 15 lpm

**ASSESSMENT**

- vitals
- history
- physical

- Length of exposure
- Type of burn
- Med. Hx.
- O2 saturation
- % body surface burn (rule of nines)

**RULE OF NINES**

**Adult**

- Head – 9%
- Anterior Torso – 18%
- Posterior Torso – 18%
- Arm – 9%
- Leg – 9%
- Neck – 1%

**Child**

- Head and Neck – 18%
- Anterior Torso – 18%
- Posterior Torso – 18%
- Arm – 9%
- Leg – 14%

**BURN CARE**

- refer to specific burn type and depth

**EMT-B**

**TRANSPORT**

- move to unit
- begin transport
- contact receiving facility

**EMT-I**

**TRANSPORT**

- move to unit
- begin transport
- contact receiving facility

**Paramedic**

**TRANSPORT**

- move to unit
- begin transport
- contact receiving facility

**Parkland Burn Formula:**  
 $(wt. \text{ in kg}) \times (\% \text{ BSA burn}) \times 4$   
 1/2 total volume over 1st 8 hours post burn  
 1/2 total volume over remaining 16 hours post burn

**IV**  
 .9 % NACL  
 TKO

**ECG**

- monitor

**IV**  
 .9 % NACL  
 TKO

This form supersedes no other



## Burn Care

### **FLAME OR SCALDS**

- cool with saline soaks for 10 – 15 min. if your arrival time is less than 30 min. post burn
- cover with dry sterile sheets after the cooling process is complete
- DO NOT allow burn patient to become chilled or shiver

### **TAR BURNS**

- cool with saline soaks for 10 – 15 min. if your arrival time is less than 30 min. post burn
  - cover with dry sterile sheets
- DO NOT allow burn patient to become chilled or shiver

### **ELECTRICAL BURNS**

- Take spinal precautions
- cover open wounds with dry sterile sheets
- assess for extremity fractures and entrance and exit wounds

### **CHEMICAL**

- Flush with water for 20 min.
- phosphorus and lime burns are exceptions to water flush – brush off chemical

### **CRITERIA FOR CRITICAL BURNS**

- Second degree > 30% BSA
- Third degree > 10% BSA
- Involve the face, hands, feet, or genitalia
- Involving the respiratory tract
- Associated with major soft tissue damage
  - Associated with fractures
  - Electrical burns
  - HF acid burns

**DEPTH OF A BURN** -The depth of tissue damage due to burn is largely dependent on the temperature and duration of the thermal energy applied to the skin. Skin contact with heat caustic chemicals, radiation or electricity results in tissue destruction of variable degrees.

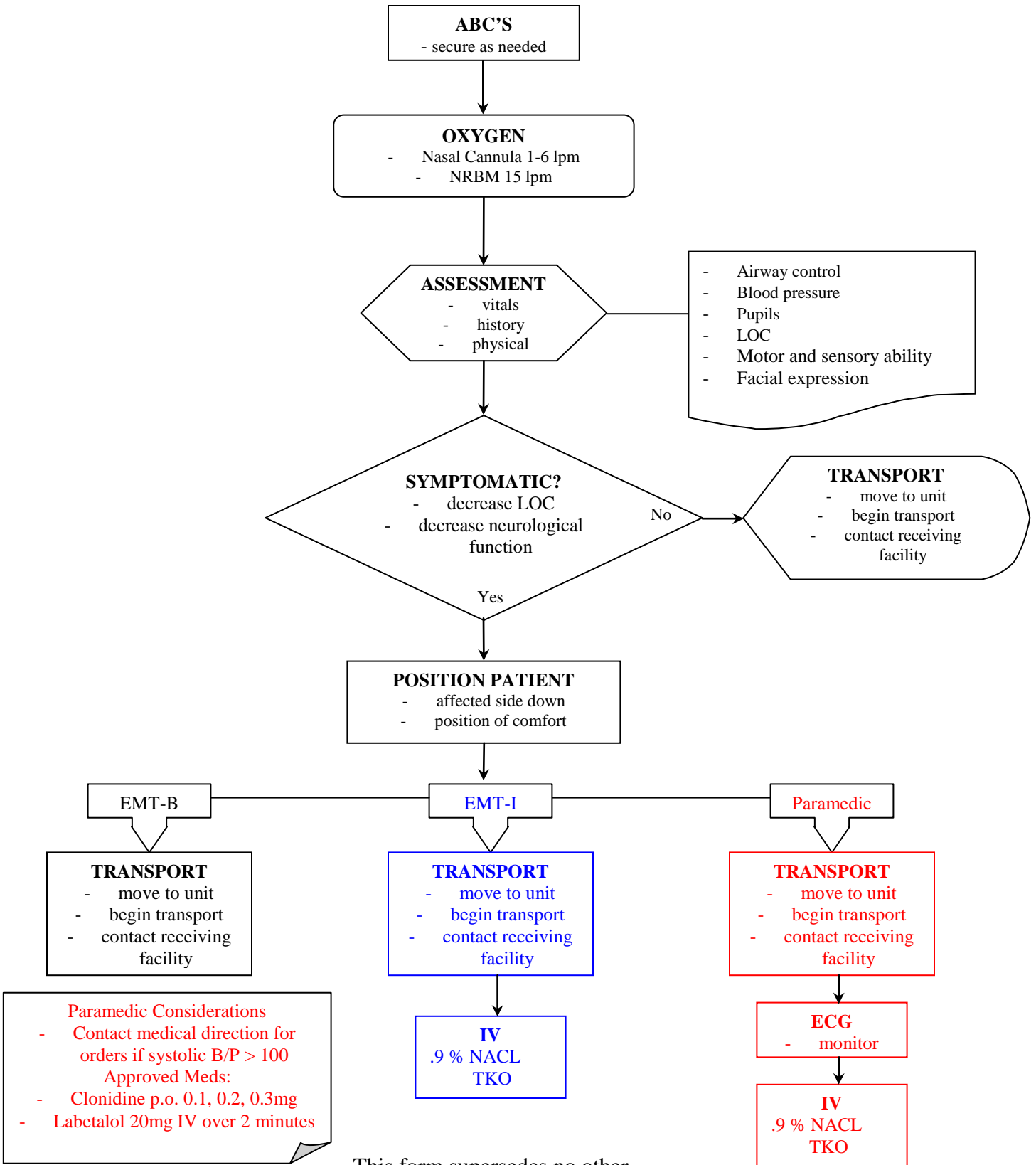
**PARTIAL THICKNESS BURNS**- First degree burns are superficial burns involving only the epidermis. The skin will be red and may be tender.

**SECOND DEGREE BURNS**-Involve the epidermis and part of the dermal layer. The skin will be red and blistered. Because sensory nerves are partially damaged, the patient will report extreme pain.

**FULL THICKNESS BURNS**-Third degree, full thickness burns destroy both layers of the skin. These burns will have a whitish or charred appearance and a tough, leathery feeling. Sensory nerves are destroyed in full thickness burns, therefore, all sensation is lost in the burned area.

**EXTENTS OF BURN**-Various methods are available to determine the extent of the burn surface. The "Rule of Nines" is the most universal guide to make an initial estimate.

# Stroke (CVA)



This form supersedes no other

## Pre-hospital Stroke Screen

Signs and Symptoms  
altered mental status  
impaired speech (aphasia or dysarthria)  
confusion/agitation  
uncoordinated movements/gait disturbance  
severe headache  
one-sided weakness (hemiparesis)  
one-sided paralysis (hypertension)  
hypertension  
lethargy/stupor/coma  
seizures  
vision disturbances  
unevenly dilated pupils

***Have pt perform following activities***

***Have pt look up at you, smile, and show his/her teeth***

Facial droop present YES\_\_\_ NO\_\_\_

***Have pt lift arms up and hold them out with eyes closed for ten seconds***

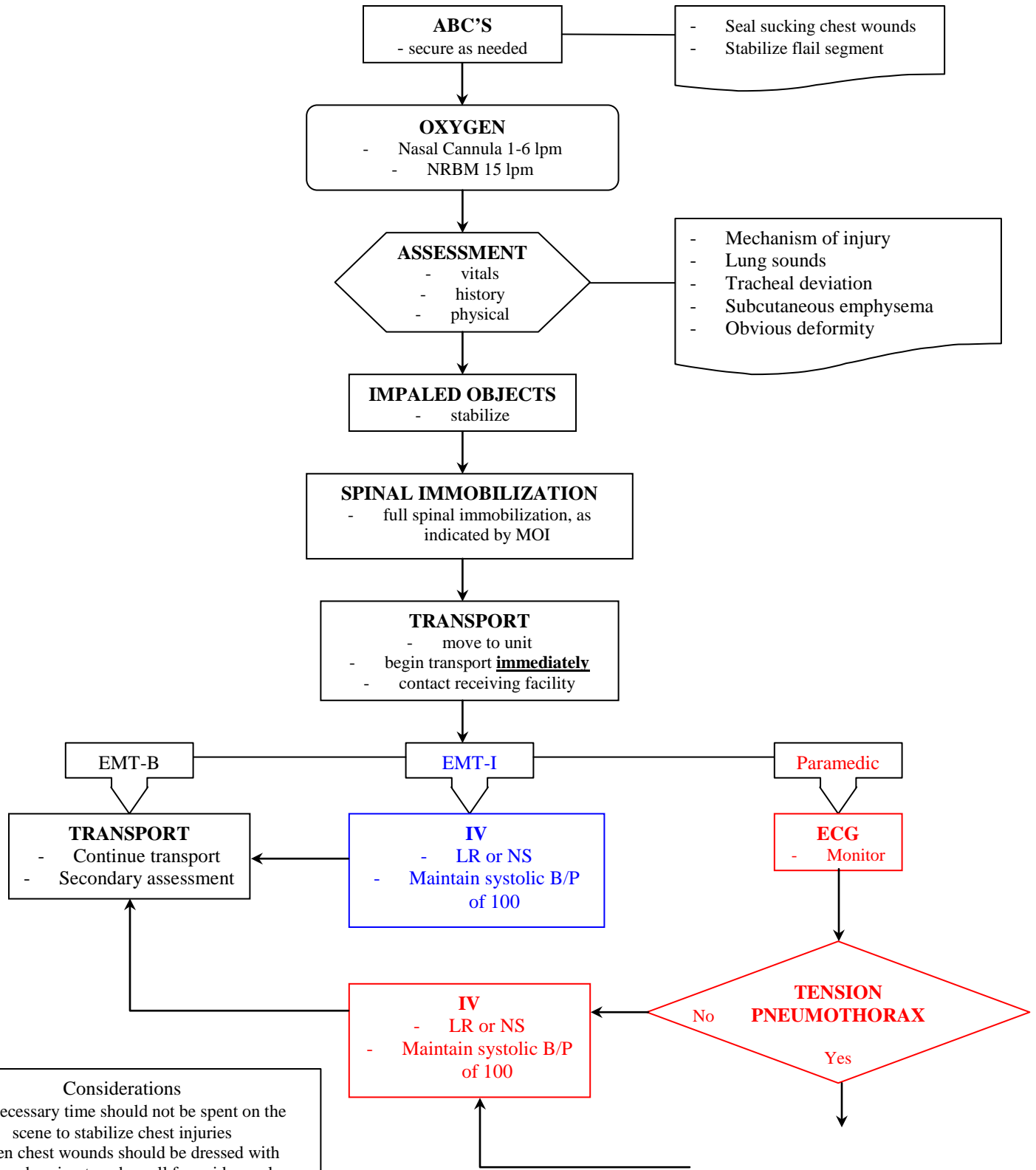
Arm Drift YES\_\_\_ NO\_\_\_

***Have pt say "you can't teach an old dog new tricks".***

Abnormal/slurring of speech YES\_\_\_ NO\_\_\_

If yes to one or more treat pt per CVA algorithm

# Chest Injuries - Trauma



**Considerations**

- Unnecessary time should not be spent on the scene to stabilize chest injuries
- Open chest wounds should be dressed with occlusive dressing taped on all four sides, unless tension pneumothorax develops; release one corner

This form supersedes no other

# CHEST INJURIES S / S & TREATMENT

## ADULT

### Simple Rib Fractures

1. Complete general management
2. Stabilize chest wall over sites of pain (patients hand and arm is best method)

### Open Chest Wounds

1. Complete general management
2. Seal open wound on deepest exhalation use vaseline gauze  
monitor very closely for tension pneumothorax  
be prepared to release pressure if tension develops

### Flail Chest

1. Complete general management
2. Stabilize chest wall with light sand bag or IV bag
3. Monitor closely for tension pneumothorax

### Tension Pneumothorax

1. Complete general management
2. Decompress the chest with Nightingale Pneumothorax set s/s
  1. Mild to severe dyspnea
  2. Diminished or absent breath sounds
  3. Anxious/restless
  4. Tachypnea
  5. Tachycardia
  6. Distended neck veins
  7. Tracheal deviation away from the affected side
  8. Cyanosis (late)
  9. Hypotension
  - 10 Subcutaneous emphysema
  - 11 Hyperresonance to percussion on affected side

### Hemothorax

1. Complete general management
2. Transport rapidly s/s
  1. Dyspnea
  2. Anxiety
  3. Restlessness
  4. Tachycardia
  5. Tachypnea
  6. Hypotension
  7. Diminished or absent breath sounds on affected side
  8. Dullness to percussion on the affected side.
  9. Neck veins may be flat or distended

### Simple Pneumothorax

1. Complete general management
2. Transport rapidly
3. It should be noted that a simple pneumothorax will not always have Sub-Q subcutaneous emphysema and should be treated symptomatically and monitor breath sounds closely.

### Traumatic Asphyxia

1. Complete general management s/s
  1. Deep violet color of the skin of the head and neck
  2. Bilateral subconjunctival petechial hemorrhages
  3. Facial edema
  4. Hematemesis
  5. Chest deformity
  6. Signs and symptoms of shock

### Pericardial Tamponade

1. Complete general management
2. May include pericardial centesis

## CHEST INJURIES S / S & TREATMENT

### Myocardial Contusion

### ADULT

### Traumatic Aortic Rupture

1. Complete general management
  2. When monitoring ECG, be especially observant for arrhythmias which may result from myocardial injury
- s/s
1. Chest pain
  2. Dyspnea
  3. Arrhythmias
  4. Bruising over chest
  5. There may be tachycardia, irregular and/or weak pulse

1. Complete general management
- Tramatic Aortic Rupture usually results from deceleration or blunt trauma. One third to one half of patients with an aortic rupture may have no signs of chest trauma.*
- s/s
1. Upper-extremity hypertension with diminished lower-extremity pulses
  2. Retrosternal or intrascapular pain
  3. Dyspnea from tracheal compression and deviation
  4. Stridor or hoarseness from compression of the recurrent laryngeal nerve

### Larynx / tracheobronchial Tree Injuries

1. Complete general management
    - Consider transtracheal jet insufflation
    - Consider cricothyrotomy
    - If unable to perform these procedures instruct the patient to breathe slowly. Slow breaths create less negative pressure on the walls of the trachea; thus there is less chance the trachea will close completely.
  2. Decompress tension pneumothorax as indicated
    - 50% of deaths from these injuries occur within one hour*
- s/s
1. Pneumothorax may develop into tension pneumothorax
  2. Hemoptysis
  3. Dyspnea
  4. Subcutaneous emphysema
  5. Cyanosis
  8. Hamman's sign-crunching sound heard with each heart beat during auscultation of the heart

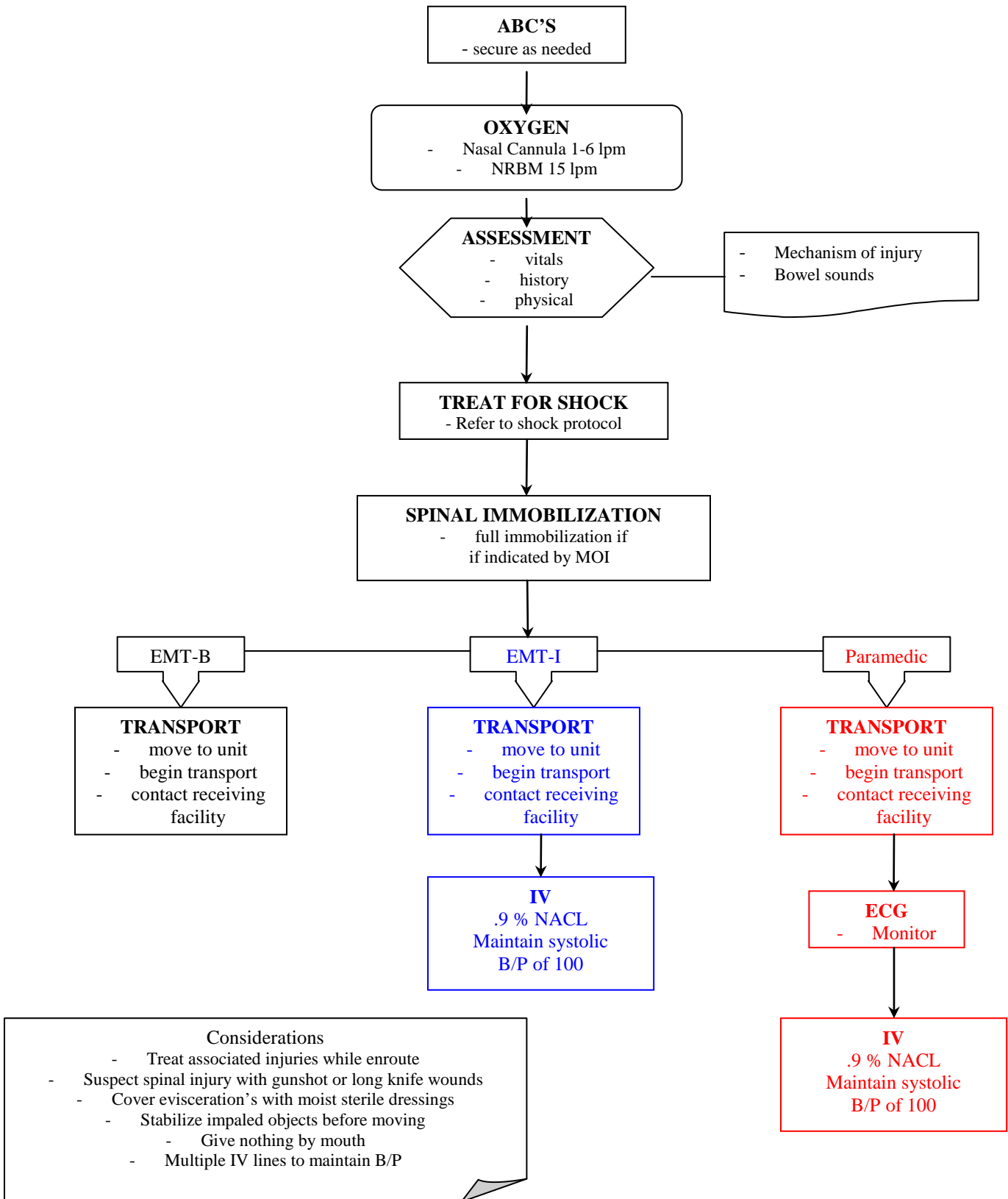
#### *Precautions:*

1. Unnecessary time should not be spent at the scene attempting to "stabilize" chest injuries when transport time is short
2. Do not be "blind" to the relative contraindication of the use of the PASG in injuries above the diaphragm. In certain instances, it may definitely be indicated and appropriate
3. Most major trauma to the chest requires your consideration to accompanying cervical and thoracic spine injury so extricate with C-collar and spine board.
4. In the smaller and rural communities, many major chest injuries will require inter-hospital transfer to the nearest facility with cardiopulmonary specialists following stabilization thus another reason to move efficiently and expeditiously on the scene
5. A hemothorax rarely causes tension and should not be evacuated in the field. It may be tamponading a vessel otherwise uncontrollable.

This form supersedes no other

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090801

# Abdominal Injuries – Trauma



**Considerations**

- Treat associated injuries while enroute
- Suspect spinal injury with gunshot or long knife wounds
- Cover evisceration's with moist sterile dressings
- Stabilize impaled objects before moving
  - Give nothing by mouth
- Multiple IV lines to maintain B/P

This form supersedes no other

# Head Injuries

**ABC'S**  
- secure as needed

**C-SPINE**  
- examine neck  
- apply c-collar  
- maintain manual stabilization

**OXYGEN**  
- Nasal Cannula 1-6 lpm  
- NRBM 15 lpm

**ASSESSMENT**  
- vitals  
- history  
- physical

- LOC  
- Pupils  
- Mechanism of injury  
- Hematomas  
- Lacerations  
- Depressions  
- Battle Signs (late sign)

**SPINAL IMMOBILIZATION**  
- full spinal immobilization

**EMT-B**

**TRANSPORT**  
- move to unit  
- begin transport  
- contact receiving facility

**EMT-I**

**TRANSPORT**  
- move to unit  
- begin transport  
- contact receiving facility

**IV**  
.9 % NACL  
Maintain systolic B/P  
of 100

**Paramedic**

**TRANSPORT**  
- move to unit  
- begin transport  
- contact receiving facility

**ECG**  
- Monitor

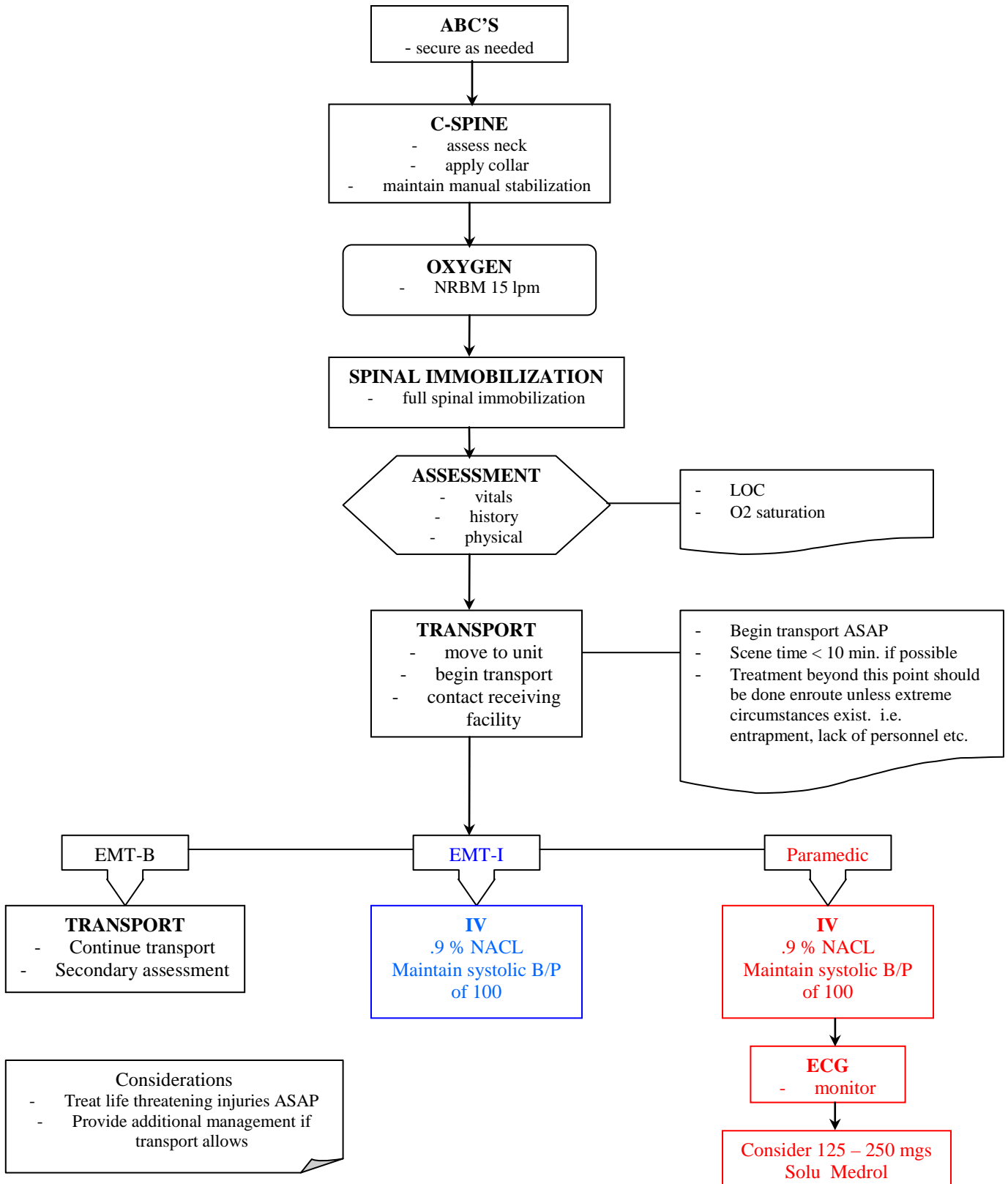
**IV**  
.9 % NACL  
Maintain systolic B/P  
of 100

**Considerations / Precautions**  
- KED for sitting patients  
- Refer to shock protocol if indicated  
- Monitor LOC and pupils frequently  
- Vomiting is common with head and spinal injuries  
- Avoid hyperventilating head injuries

This form supersedes no other

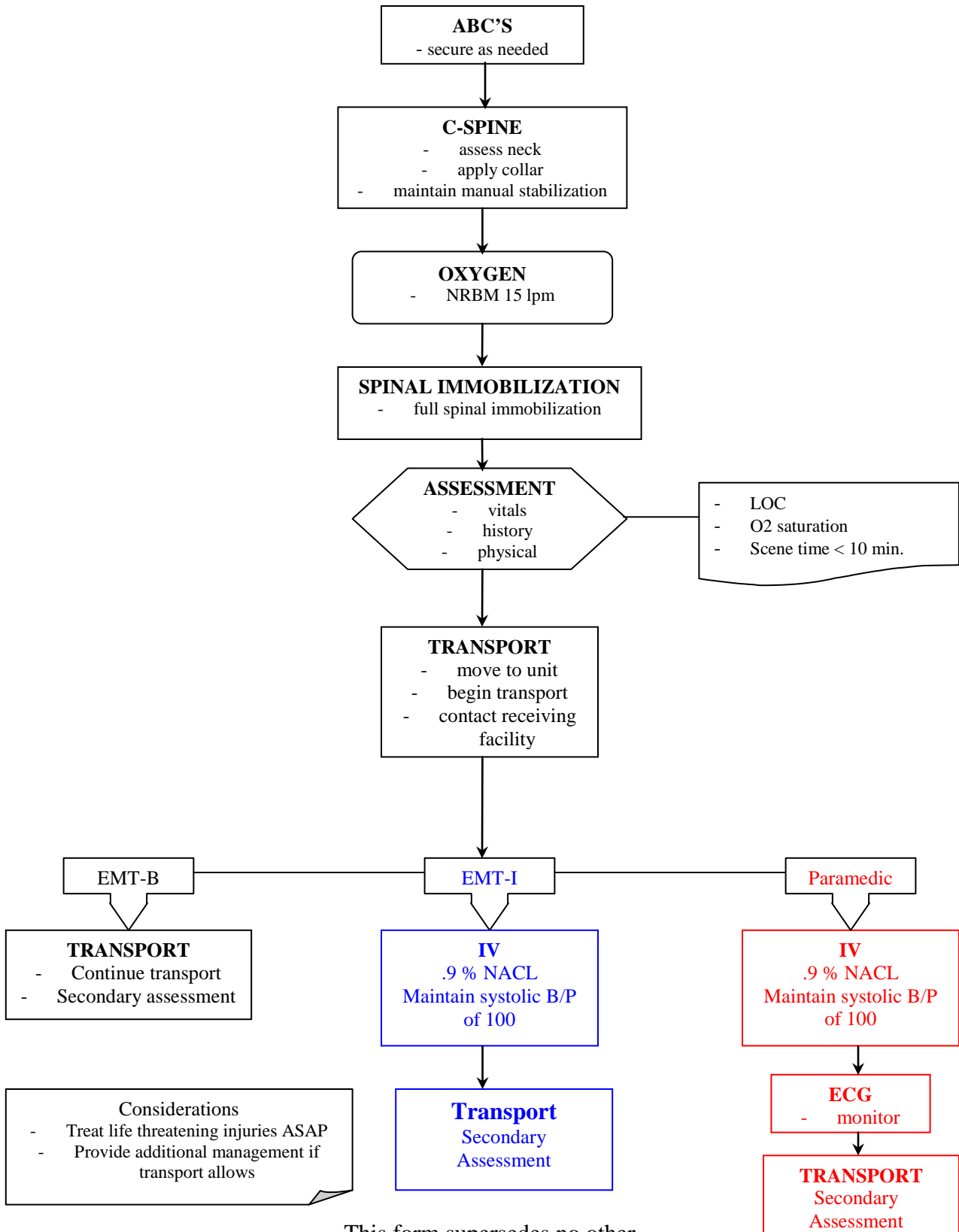


# Spinal Trauma



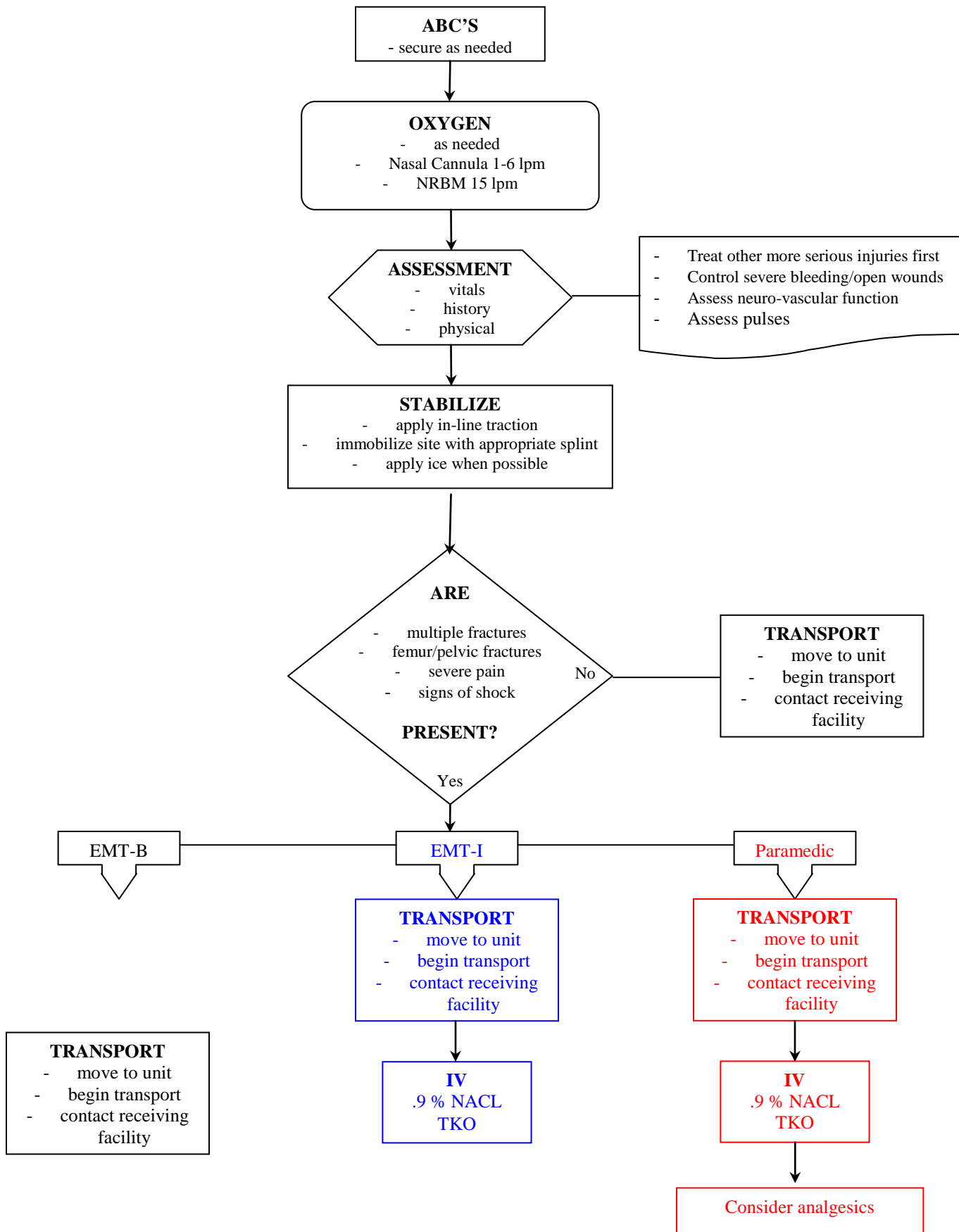
This form supersedes no other

# Multiple Systems Trauma



This form supersedes no other

# Orthopedic Injuries



## **Orthopedic Injuries**

### **Fracture Immobilization Procedure**

- Angulated long bone fractures should be straightened.
- Injuries involving joints should be splinted in the position found unless there is neuro-vascular compromise. You may then attempt to straighten the extremity one time.
  - Consider using MAST for multiple fractures involving the lower extremities.
  - Immobilize the extremity before moving the patient whenever possible.
    - Immobilize joints above and below the fracture site.
- Too much traction can distract fractures and compromise circulation. If neuro-vascular function is diminished or lost following application of traction, gently release traction until circulation is restored.

### **Care of Amputated Part**

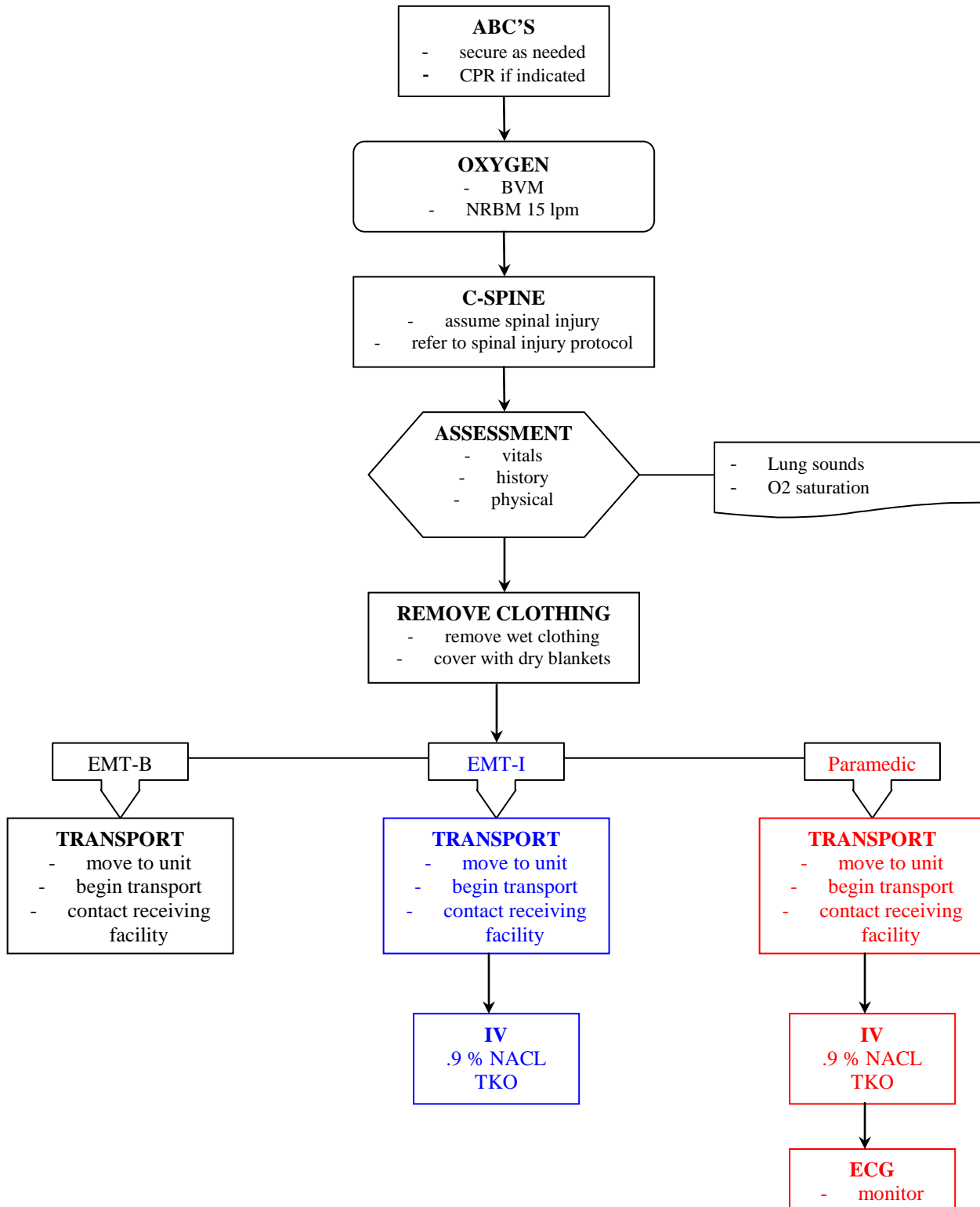
- Rinse part gently with normal saline to remove loose debris; do not scrub
- Wrap amputated part in gauze moistened with saline and transport with patient.
- Place wrapped part in plastic bag and seal with tape (do not immerse part in water/saline). Label with name, date and time.
- For long transport, wrap amputated part as listed above and keep cool. Place in cooler with cold pack or ice, but not in direct contact with ice.

### **Orthopedic Emergencies**

- Open Fractures
  - Long bone fractures with joint dislocation.
- Fracture with neuro-vascular embarrassment that is irreversible in the field.
  - Fractures with large blood loss or associated serious injury.
    - Absent pulses distal to the fracture site.

This form supersedes no other

# Drowning or Near Drowning



## **Drowning and Near Drowning**

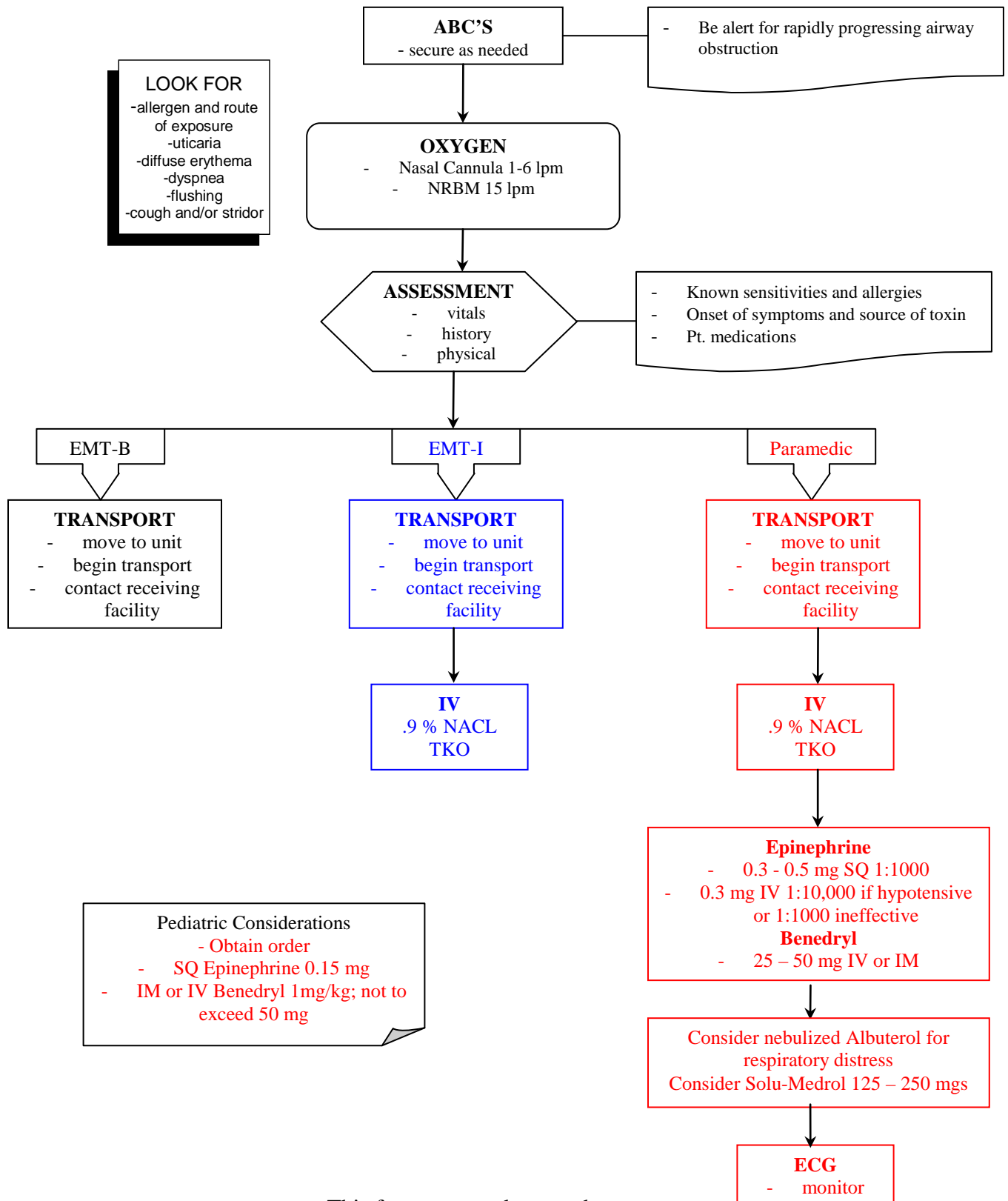
### **Considerations**

- Scene assessment should include the following:
  1. Submersion time
  2. Water surface temp. and depth if possible
  3. MOI
  4. Type of clothing or floatation device
  5. Location victim last scene
  6. Time of last meal/fluids ingested
  
- If shocks are to be given, dry patient as much as possible before administration
  
- Resuscitation should be considered if submersion has been < 2 hrs. and if water temp. is < 70 degrees
  
- For every 10-ft. change in water depth may result in a 2-degree change in water temp.
  
- Any patient with significant submersion accident should be transported due to possible aspiration, pulmonary edema or pulmonary complications

This form supersedes no other

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090801

# Anaphylaxis



This form supersedes no other