



PREHOSPITAL TREATMENT ALGORITHMS

Developed by Trinidad Ambulance District
Medical Director: Kevin J. Weber, M.D.
Executive Director: Brandon Chambers, NREMT-P
Flowcharting: Greg Williams, NREMT-P

Prehospital Treatment Algorithms

SECTION DESCRIPTIONS

Standing Orders	Section 1.00
Standing Orders	1.00
Transport	Section 2.00
Triage	2.40
Airway Management	Section 3.00
Airway – Management	3.05
Airway – Opening	3.10
Airway – Assisting Ventilations	3.15
Airway – Clearing	3.20
Airway – Obstruction	3.25
Airway – King LTS-D	3.61
Environmental	Section 4.00
Bites and Stings	4.05
Burns	4.10
Drowning	4.25
Hazardous Materials	4.28
High Altitude Illness	4.30
Hyperthermia	4.35
Hypothermia and Frostbite	4.40
Snakebite	4.45
Medical	Section 5.00
Abdominal Pain	5.05
Allergic Reaction / Anaphylaxis	5.10
Altered Mentation / Coma	5.15
Cardiac Arrest	5.20
Chest Pain	5.25
Childbirth	5.30
CVA/Neuro Deficit	5.40
Hypertension	5.50
Poison and Overdose	5.55
Respiratory Distress	5.60
Seizures	5.65
Shock – Medical	5.70
Syncope	5.75
Vaginal Bleeding	5.80
Vomiting / Diarrhea	5.85

Prehospital Treatment Algorithms

SECTION DESCRIPTIONS

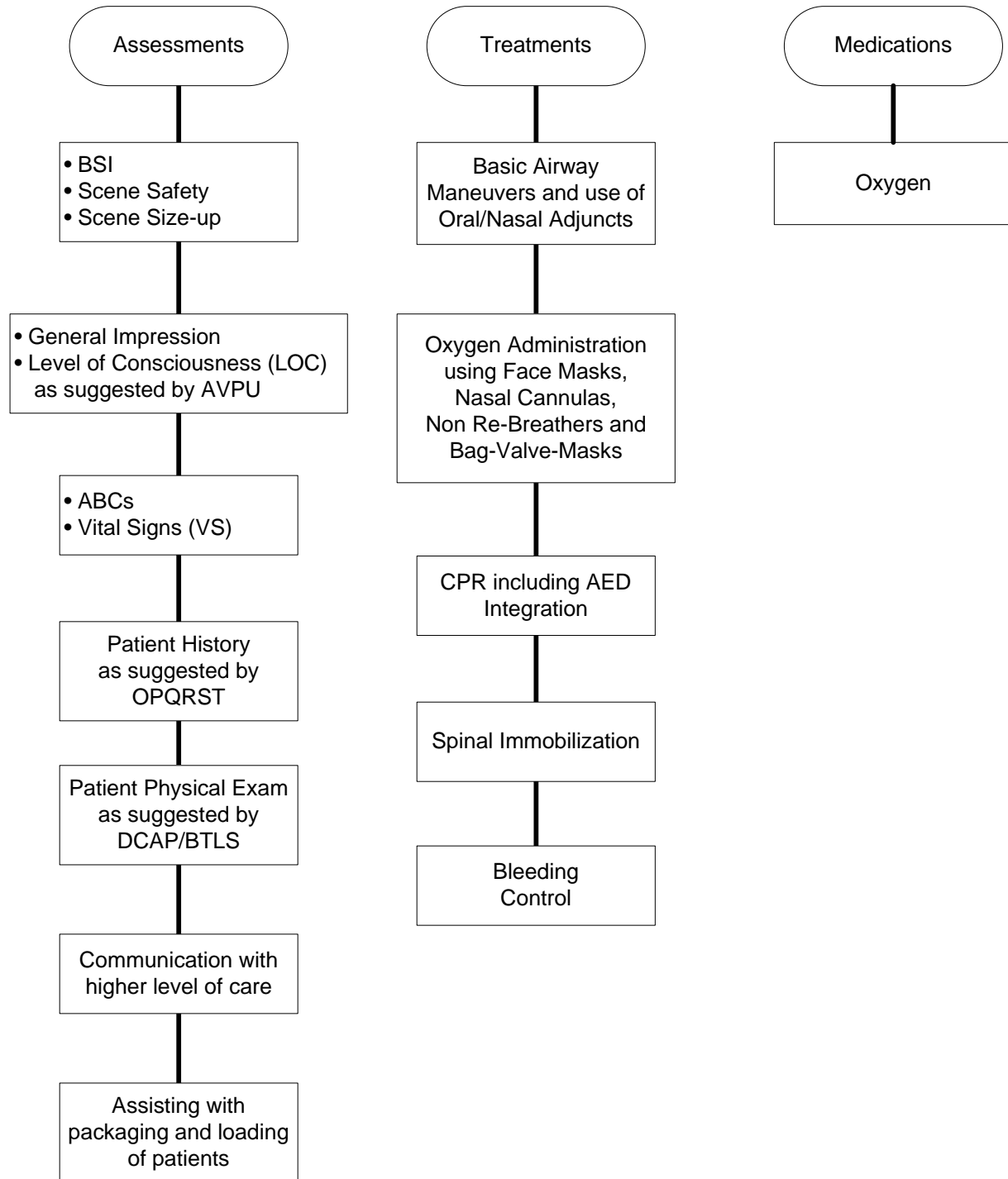
Trauma	Section 6.00
Abdominal Injury	6.05
Amputations	6.10
Chest Injury	6.15
Extremity Injury	6.20
Face / Neck Injury	6.25
Head Injury	6.30
Shock – Trauma	6.35
Special Injury	6.40
Spinal Injury	6.45
Pediatric	Section 7.00
Pediatric – Overview	7.05
Pediatric – Respiratory Distress	7.10
Pediatric – Seizures	7.15
Neonatal Resuscitation	7.20
Infant / Child Resuscitation	7.25
Procedures	Section 8.00
Metered Dose Inhaler	8.50.1
Medication Administration – IN	8.50.2
Medication Administration – IV	8.50.3
Medication Administration – Nebulizer	8.50.4
Spinal Immobilization	8.65
Medications	Section 9.00
Aspirin	9.03
Albuterol	9.09
Activated Charcoal	9.16
Dextrose	9.18
Oral Glucose	9.18
Epinephrine	9.30
Naloxone	9.69
Nerve Agent Antidote	9.70
Nitroglycerine	9.72
Oxygen	9.75
Appendices	Section 10.00
Abbreviations	10.05
Assessment	10.10
Documentation	10.15

Standing Orders

First Responders (FR)

First Responders

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



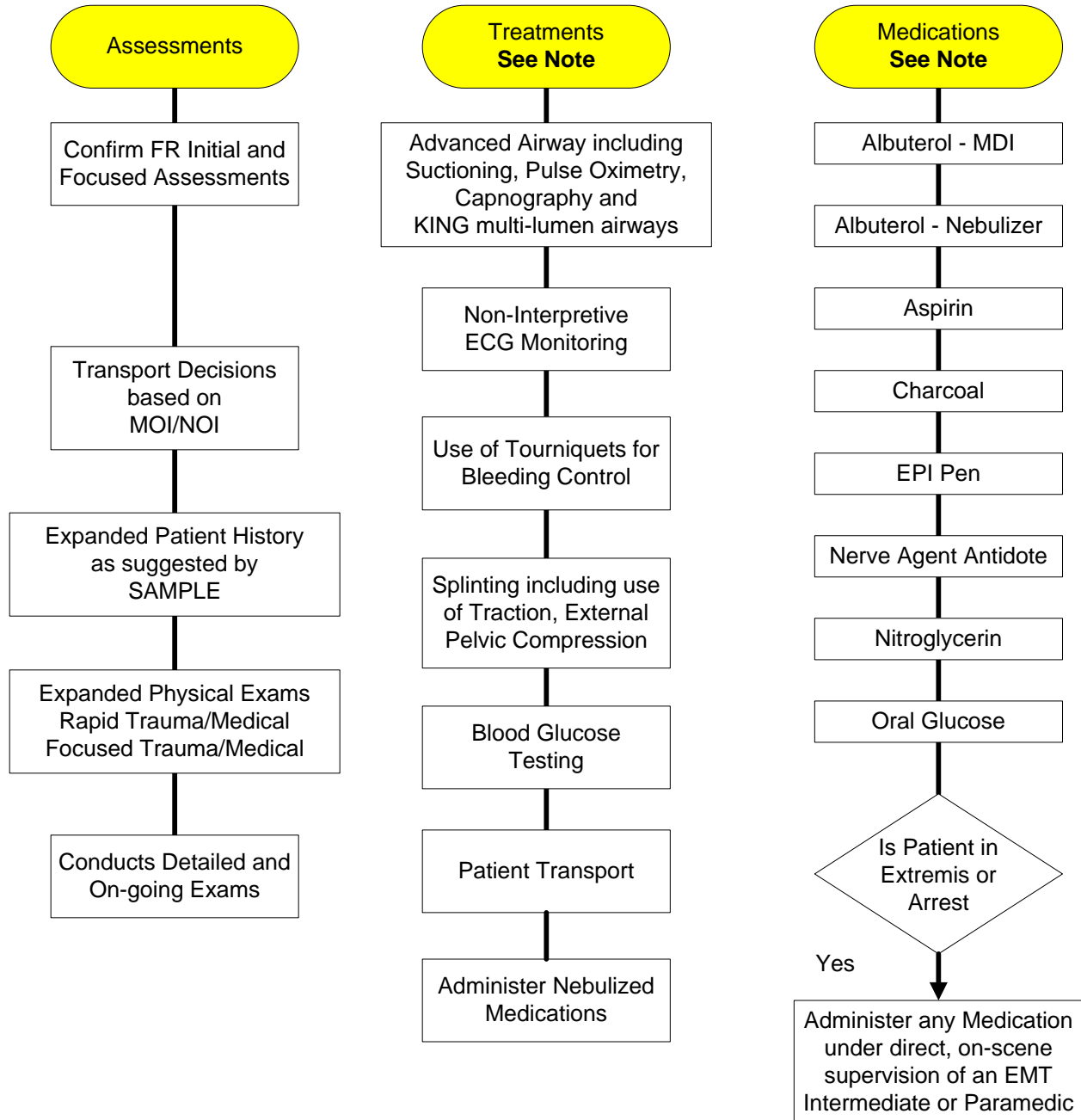
Standing Orders

EMT-Basics (B)

EMT-Basics

	FR	B	B+	I	P
Act Allowed		X	X	X	X
Standing Order		X	X	X	X

An EMT-Basic performs Assessments and Treatments as listed for First Responders. In addition EMT Basics also:



Note: Many of the advanced practices listed above may have specific restrictions or may require additional training and/or orders from On-line Medical Control. Specific reference to appropriate local protocols should be made.

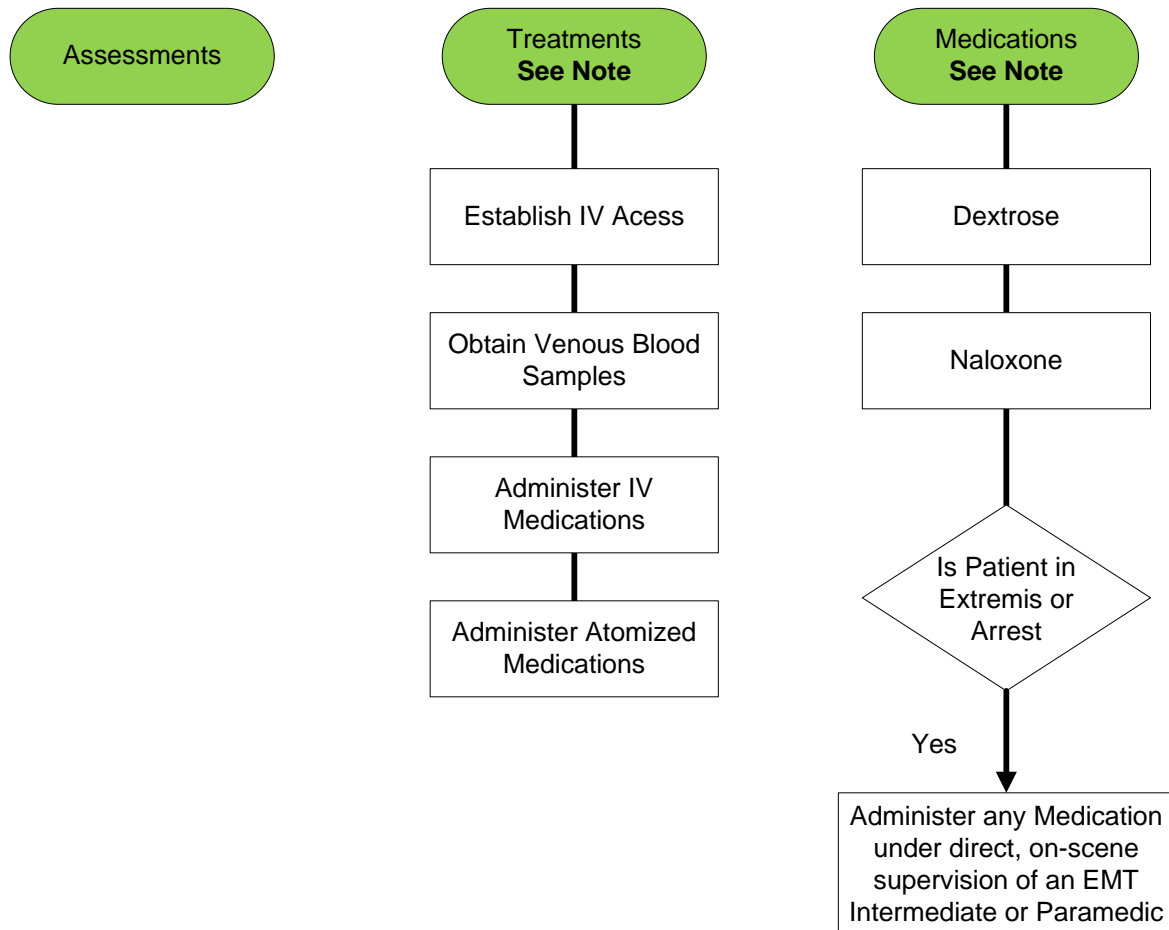
Standing Orders

EMT-Basics/Plus (B+)

EMT-Basics/Plus

	FR	B	B+	I	P
Act Allowed			X	X	X
Standing Order			X	X	X

An EMT-Basic/Plus performs Assessments and Treatments as listed for EMT-Basics. In addition EMT Basics/Plus also:



Note: Many of the advanced practices listed above may have specific restrictions or may require additional training and/or orders from On-line Medical Control. Specific reference to appropriate local protocols should be made.

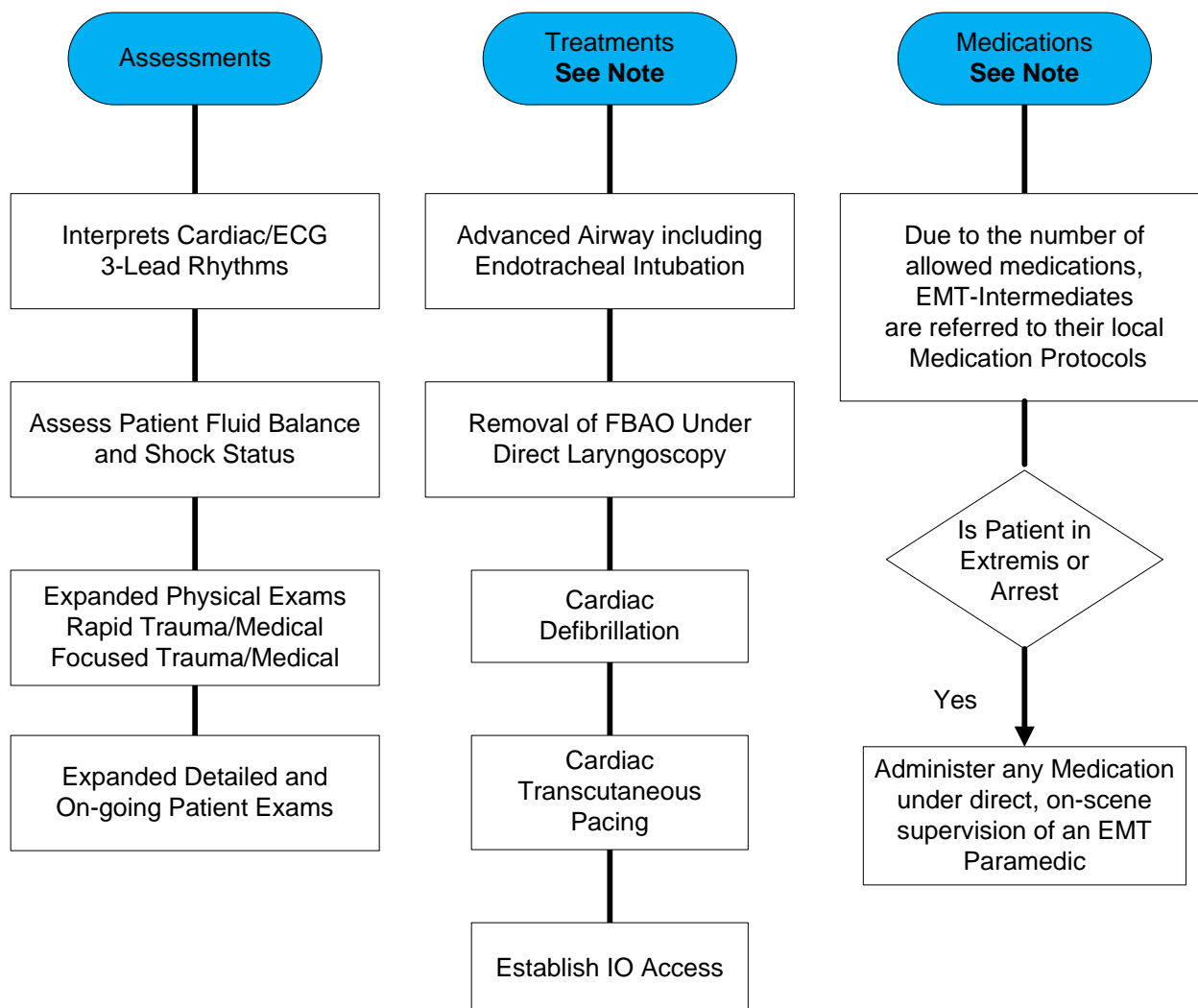
Standing Orders

EMT-Intermediates (I)

EMT-Intermediates

	FR	B	B+	I	P
Act Allowed				X	X
Standing Order				X	X

An EMT-Intermediate performs Assessments and Treatments as listed for EMT-Basics and Basics/Plus. In addition EMT-Intermediates also:



Note: Many of the advanced practices listed above may have specific restrictions or may require additional training and/or orders from On-line Medical Control. Specific reference to appropriate local protocols should be made.

Standing Orders

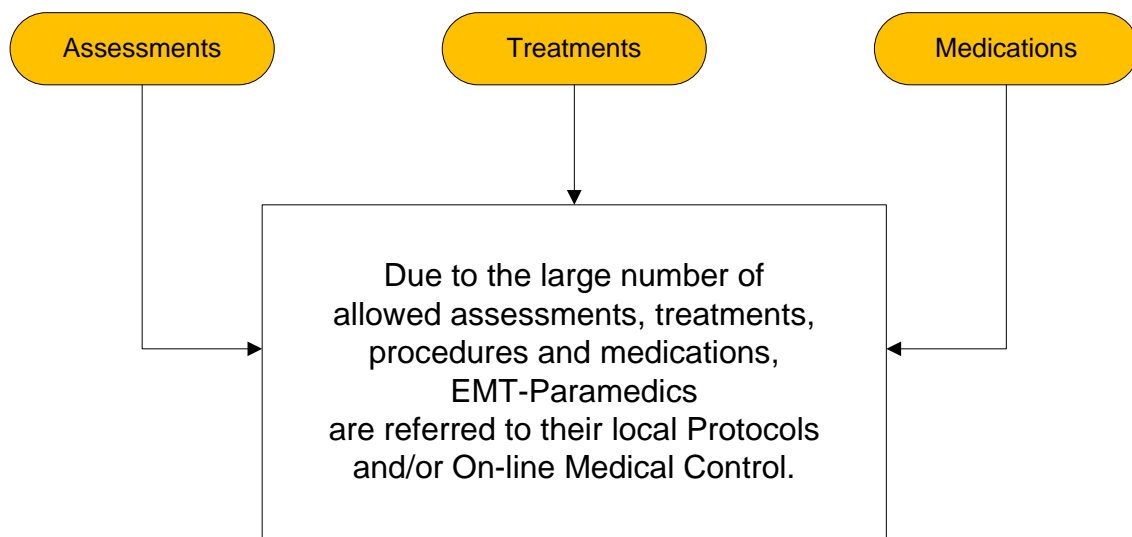
EMT-Paramedics (P)

EMT-Paramedics

	FR	B	B+	I	P
Act Allowed					X
Standing Order					X

EMT-Paramedics complete patient assessments, provide patient treatments and administer patient medications as listed for EMT Intermediates, with a more comprehensive view of patient care. The expanded Scope-of-Paramedic-Practice is outlined in the Protocols for each individual Service. EMT Paramedics must contact On-line Medical Control to administer many of the drugs; as well as perform many of the procedures, and provide many of the treatments included within these Protocols.

EMT-Paramedics performing duties under these protocols are expected to know and observe the On-line Medical Control requirements.



Refusal of Care

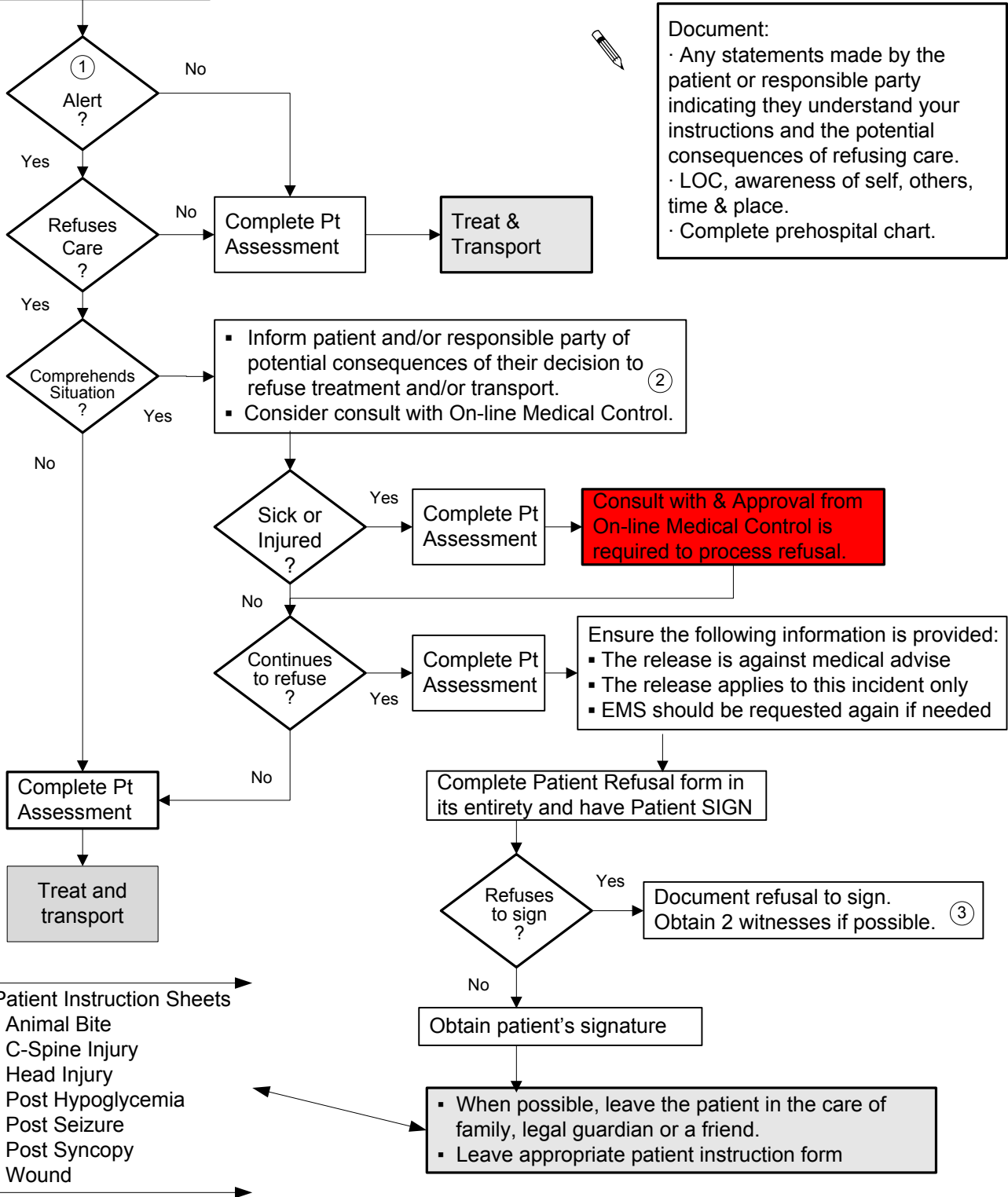
ALS Care

	FR	B	B+	I	P
Act Allowed		X	X	X	X
Standing Order				X	X

Contact On-line Medical Control

Determine:

- Mental Status
- History of Illness
- Mechanism of Injury



1 "Alert" implies the patient is conscious, oriented to person, place, and time. Glasgow Coma Scale = 15.

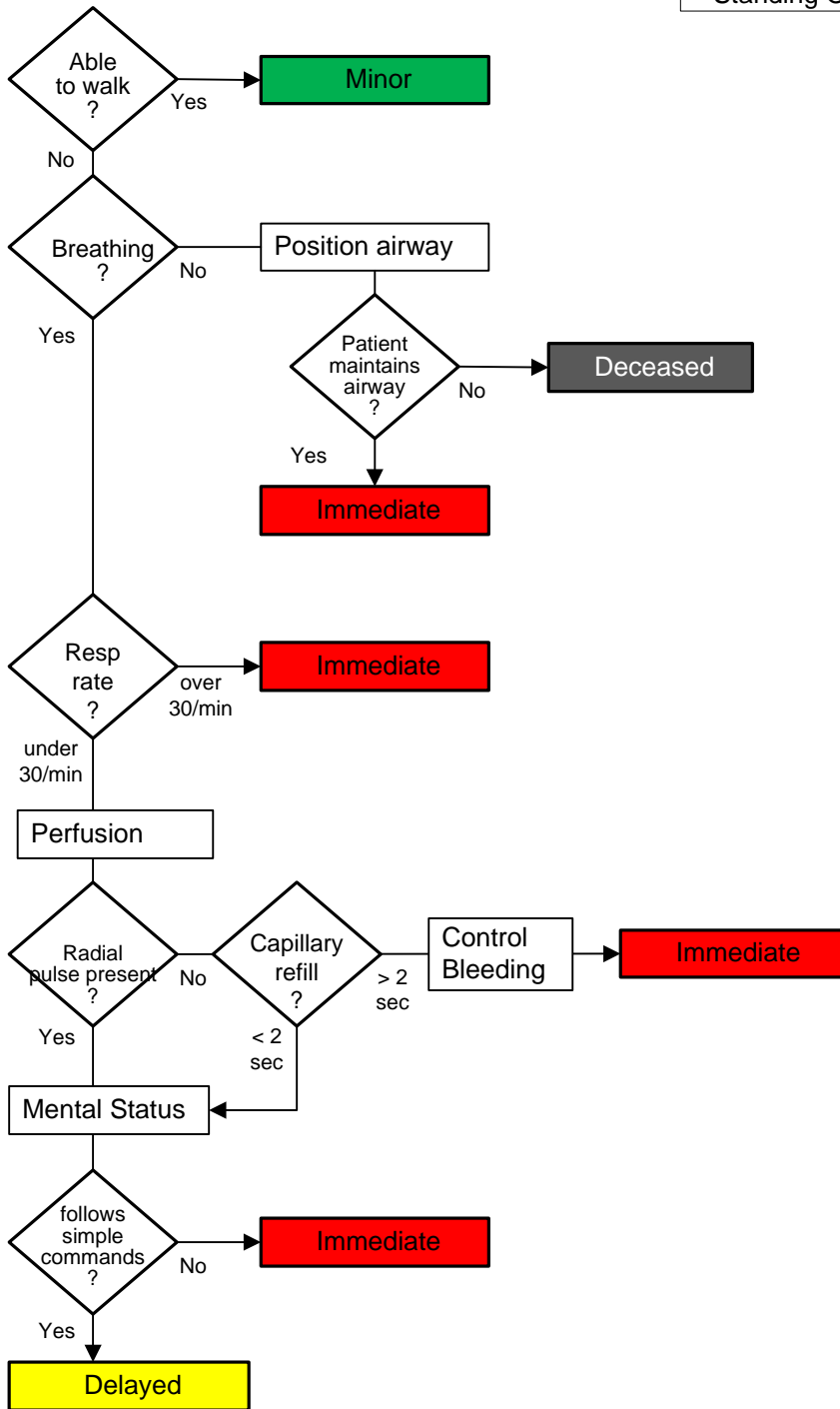
2 Ensure patient understands these consequences.

3 Witnesses should not be EMS personnel, and must sign the release.

START Triage

BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



Adapted from START Triage, originally developed by:
 Hoag Memorial Hospital Presbyterian and
 Newport Beach Fire Department

Airway Management

Document:

- Respiratory Effort
- Lung Sounds
- SpO2, EtCO2
- Response to Treatment
- Skin Color
- Glasgow Coma Scale



- Assess Breathing
- Monitor SpO2
- Transport ASAP

1

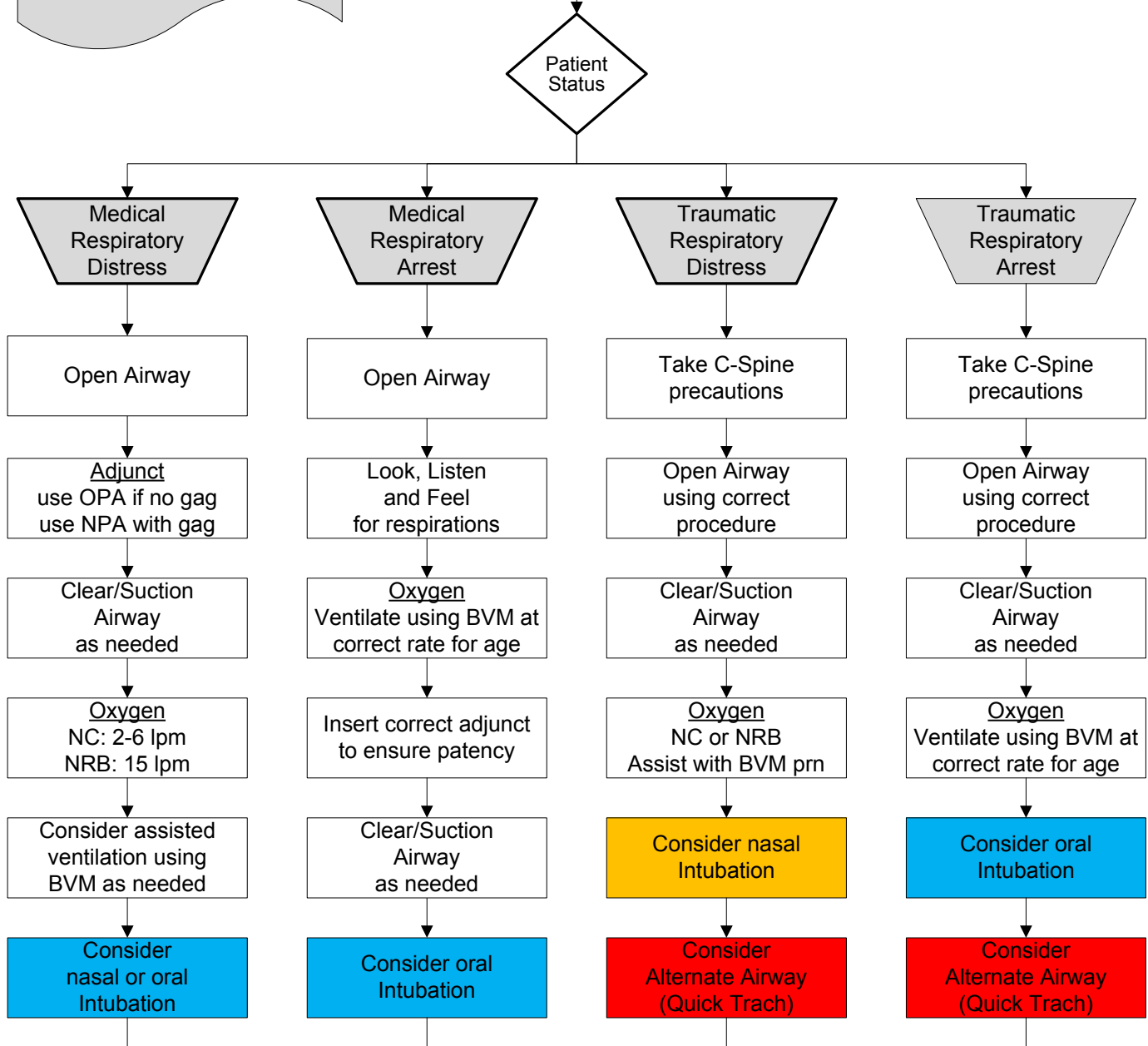
BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

ALS Care

	FR	B	B+	I	P
Act Allowed				X	X
Standing Order				X	X

Contact On-line Medical Control



- Monitor:**
- ABCs
 - Vital Signs
 - LOC
 - Cardiac Rhythm
 - SpO2, ET/CO2
 - Respiratory Status

2

- 1 COPD patients often use their Hypoxic Drive. In these cases, expect and accept SpO2 readings >85% and <90%. Lower concentrations of oxygen may be indicated yet never deprive a patient in respiratory distress of Oxygen.
- 2 IF RESPIRATORY EFFORT OR LEVEL OF DISTRESS CHANGES MOVE TO THE APPROPRIATE ASPECT OR ARM OF THIS PROTOCOL.

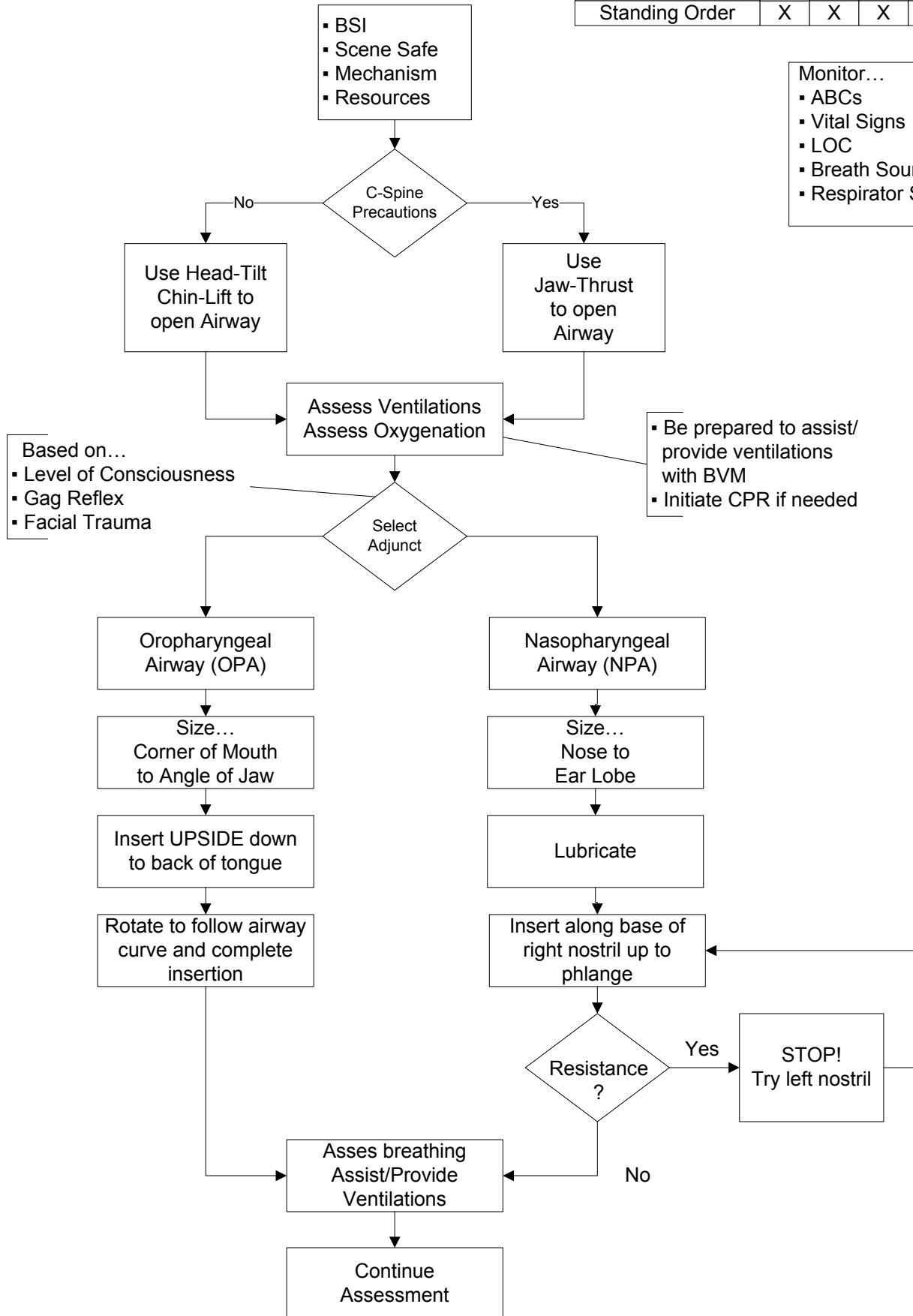
Airway - Opening

BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Monitor...

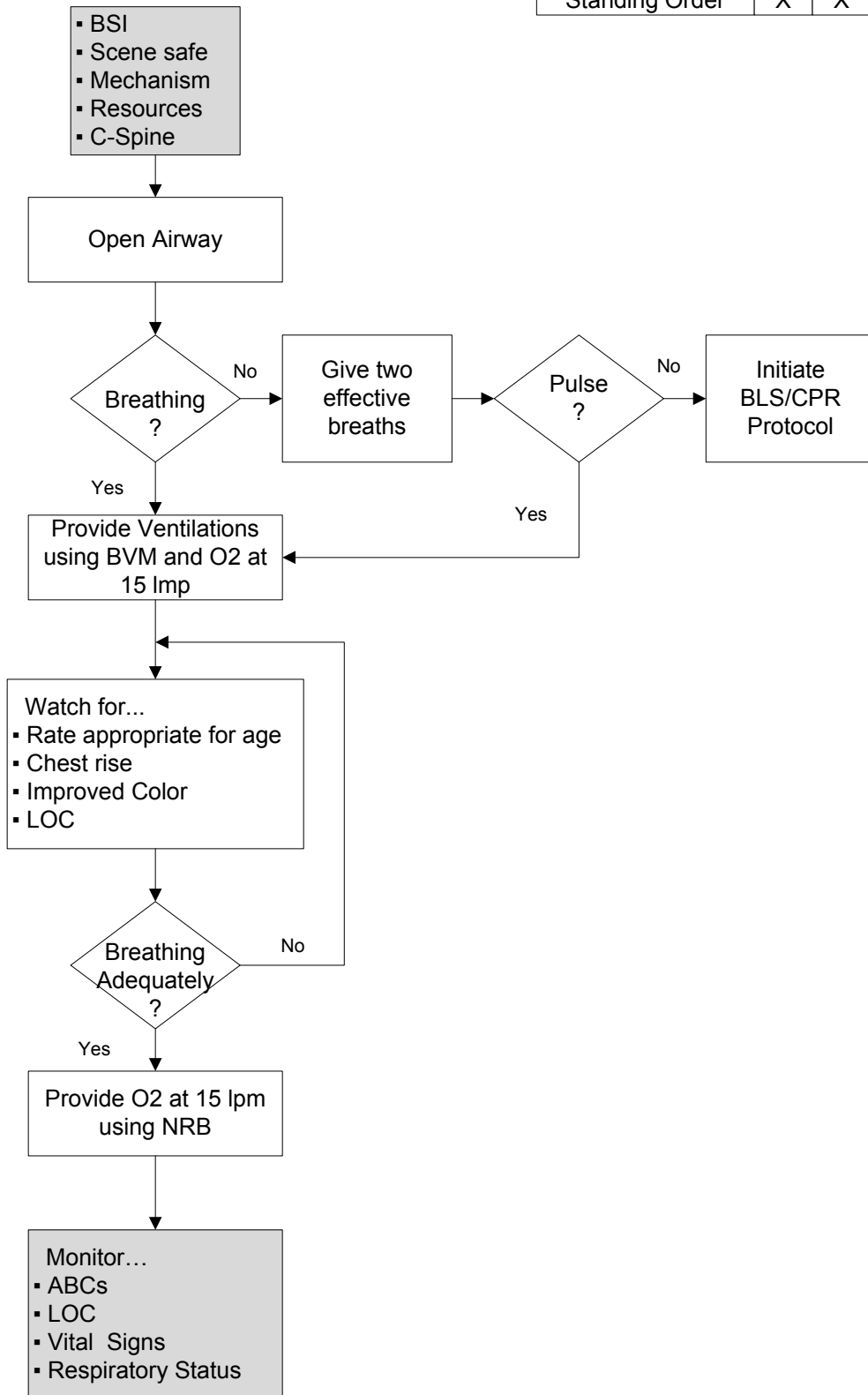
- ABCs
- Vital Signs
- LOC
- Breath Sounds
- Respirator Status



Airway – Assisting Ventilation

BLS Care

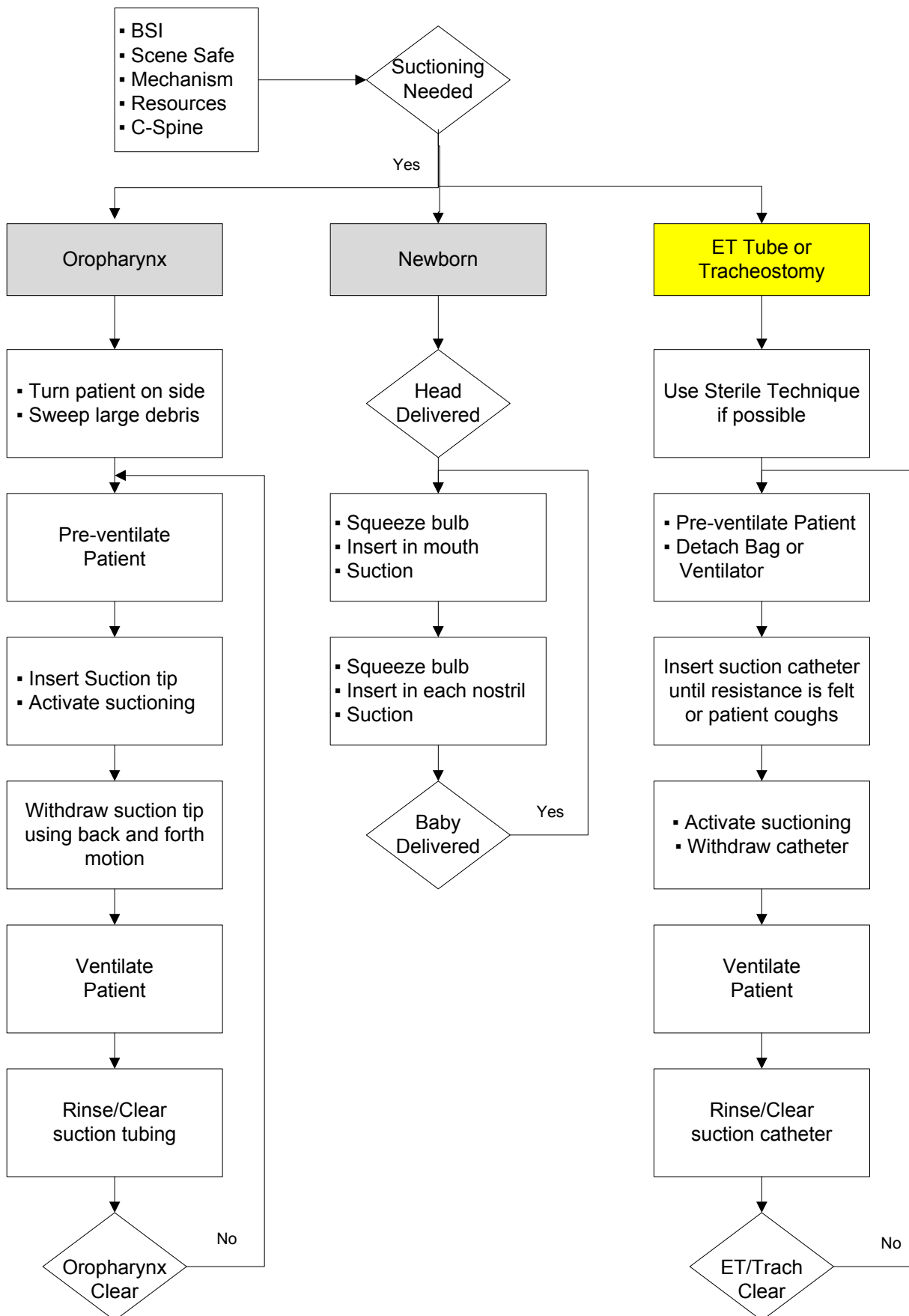
	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



Airway - Clearing

BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

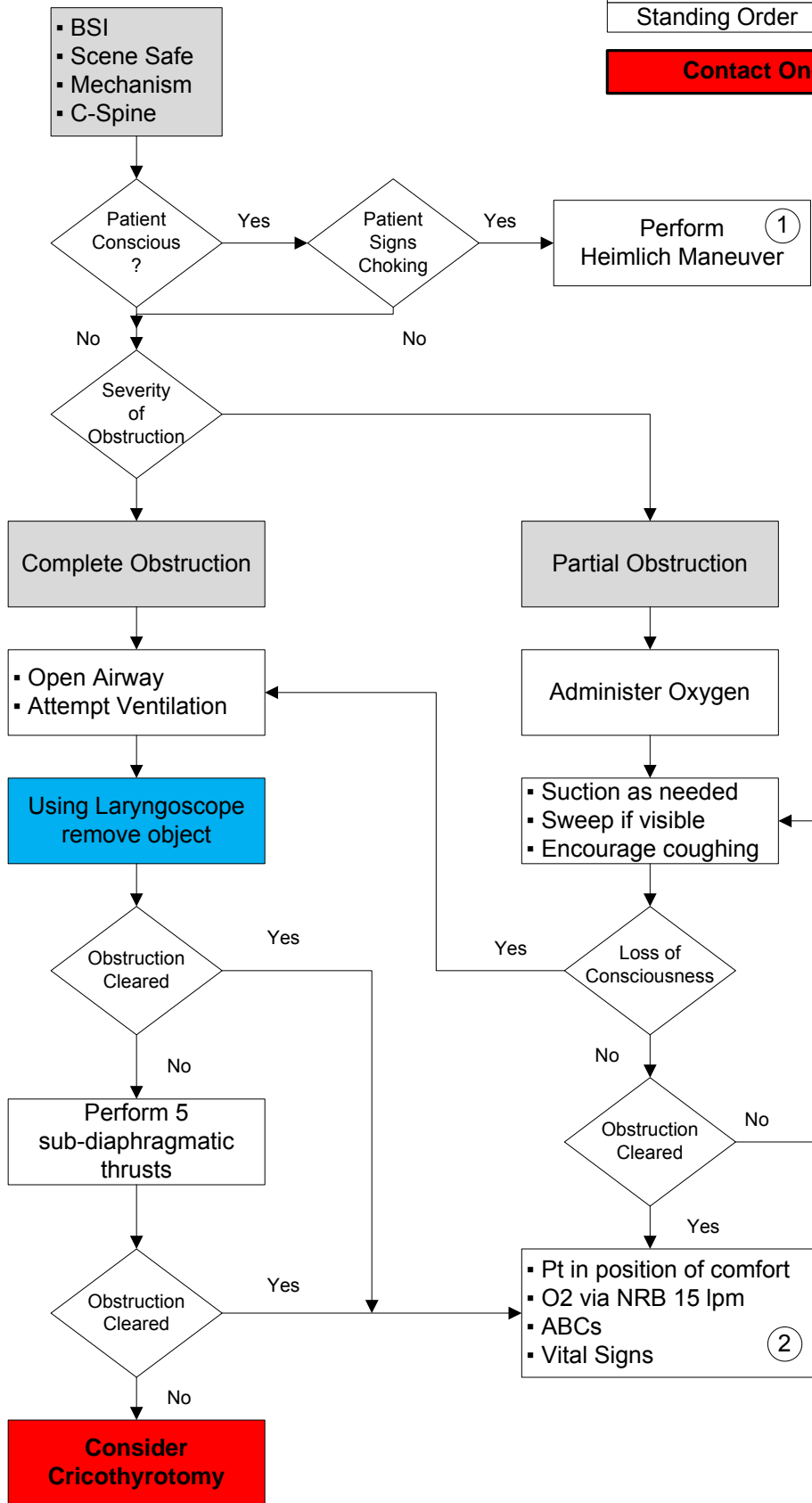


Airway Obstruction

ALS Care

	FR	B	B+	I	P
Act Allowed				X	X
Standing Order				X	X

Contact On-line Medical Control



Notes:

- 1 Chest thrusts for pregnant, obese, infant patients
- 2 Be prepared for patient to Vomit

KING LTS-D Airway

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed		X	X	X	X
Standing Order		X	X	X	X

- BSI
- Scene Safety
- Resources
- C-Spine

Indications:

- Inability to intubate patient who is in need of airway protection
- Difficulty with intubation when rapid control of the airway is essential
- May be particularly useful for patients with facial or cervical spine abnormalities
- Designated supraglottic airway for EMT-Basics

Contraindications:

- KING devices are sized based on patient height. If your patient is less than 4 feet tall you need to use a KING pediatric sized device.
- Cannot be used in patients with an intact gag reflex
- Should not be used in patients who have ingested a caustic substance
- Should not be used in patients with a known esophageal disease
- Should be used with caution in patients with broken teeth or dental work that may tear the balloons

Technique:

1. Initiate airway control per BLS protocols.
2. Select proper size KING airway: size 3 for 4'-5', size 4 for 5'-6' and size 5 for >6' tall patient.
3. Assemble equipment, check cuffs for leaks, lubricate distal tip and posterior aspect ONLY.
4. Suction airway as needed and pre-oxygenate patient if possible.
5. For a trauma patient have assistant maintain head in neutral position. For a medical patient the "sniffing position" is appropriate or slight hyperextension may be used to ease insertion.
6. Hold the KING in dominant hand at the connector. With other hand open mouth and lift chin.
7. Rotate the KING laterally so the blue index line is facing the corner of the mouth.
8. Introduce the tip and advance the KING behind the base of the tongue.
9. As tube passes the tongue rotate the KING back to midline so the blue index line is facing the chin.
10. Without excessive force advance the KING until base is aligned with teeth or gums.
11. Using syringe inflate cuffs with correct volume of air: size 3 – 50mL, size 4 – 70mL, size 5 – 80mL.
12. Attach BVM to KING and begin bagging patient. Simultaneously withdraw KING SLOWLY until ventilation is easy and free flowing (adequate tidal volume with minimal airway pressure).
13. Confirm placement by auscultation, chest movement, and EtCO₂ per capnography protocol.
14. Monitor patient carefully for vomiting and possible aspiration.

Monitor:

- ABC's
- Vital Signs
- Return of spontaneous respiration
- Need to extubate patient

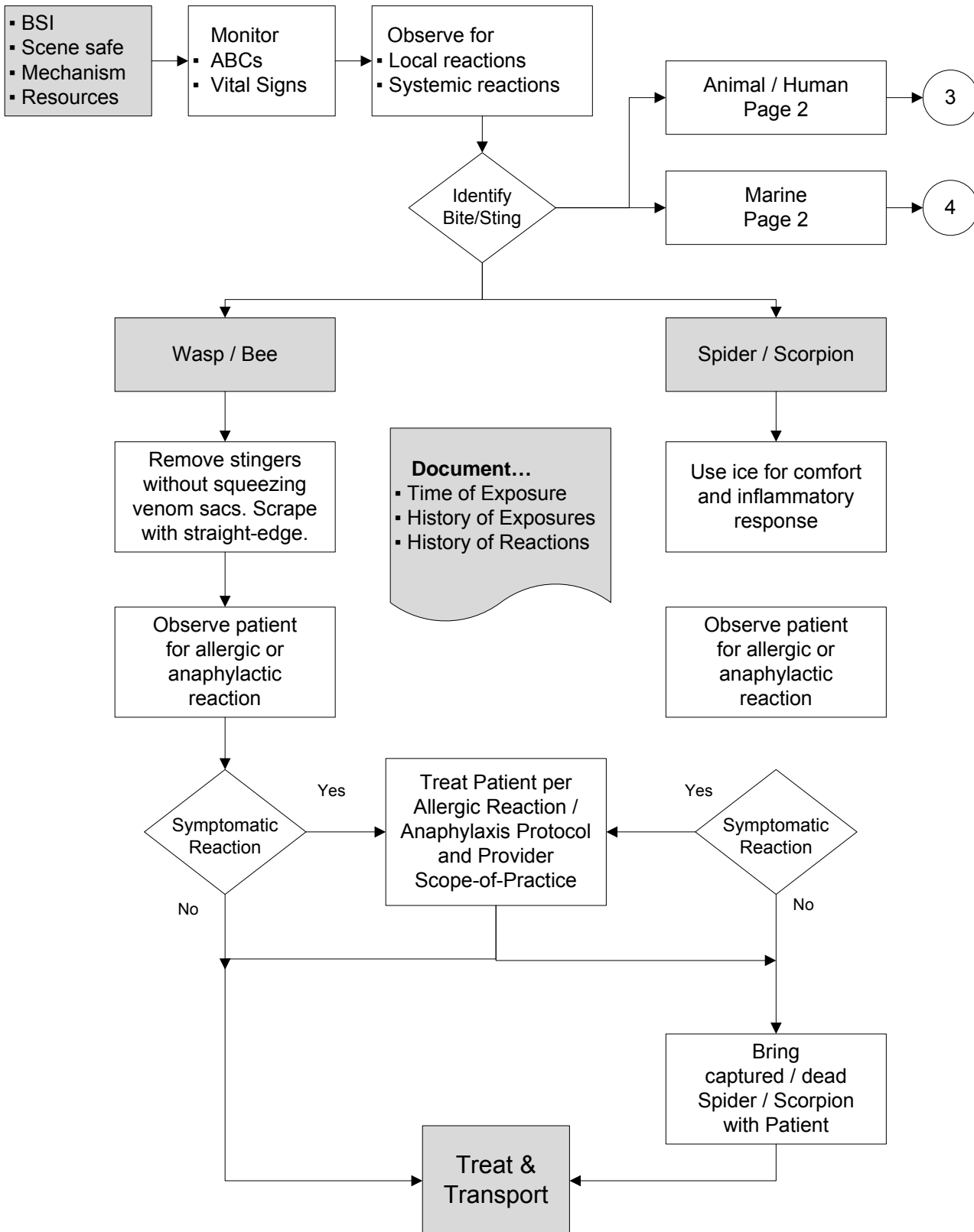
Bites and Stings

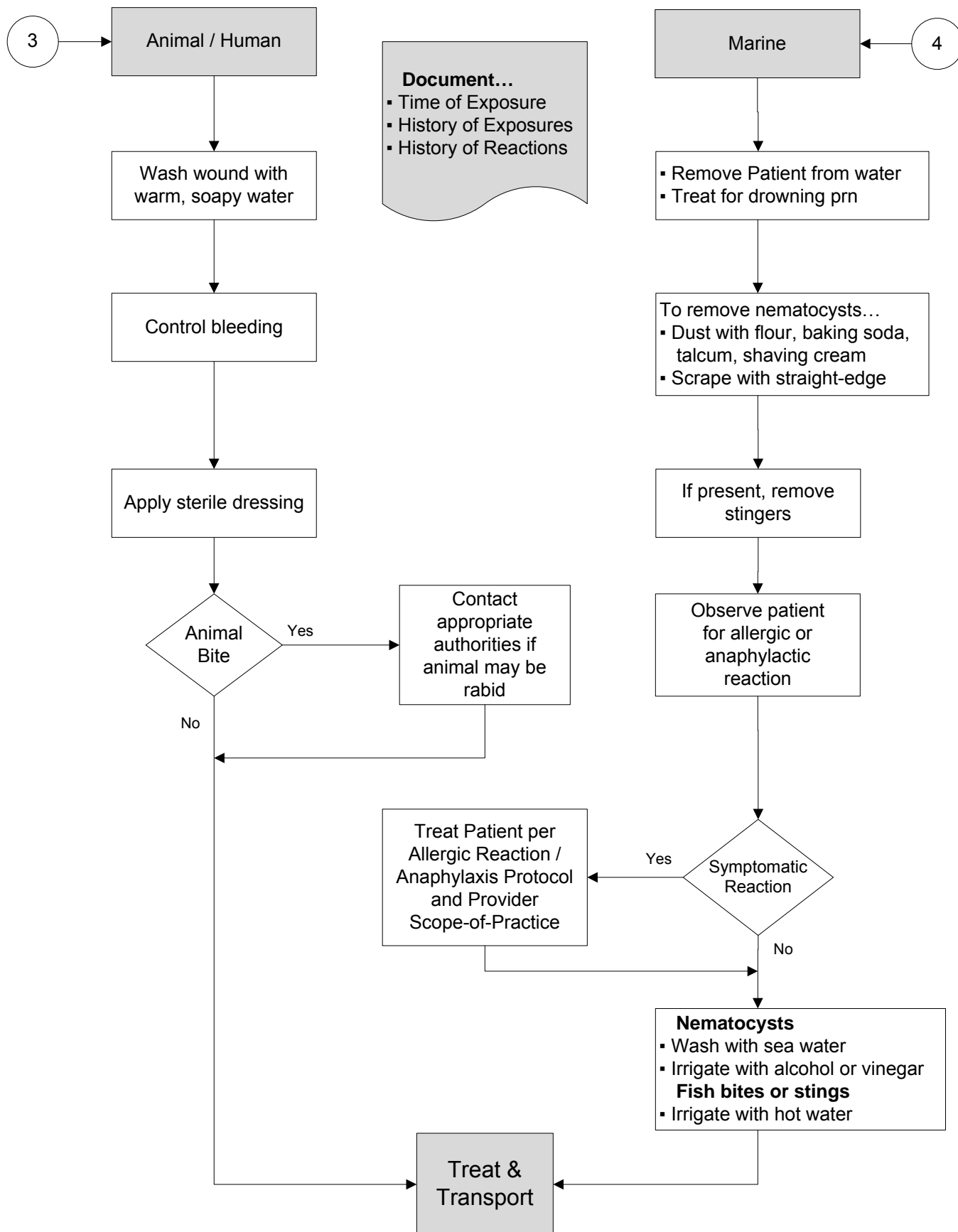
For Snakebite see 4.45_Snakebite

BLS Care

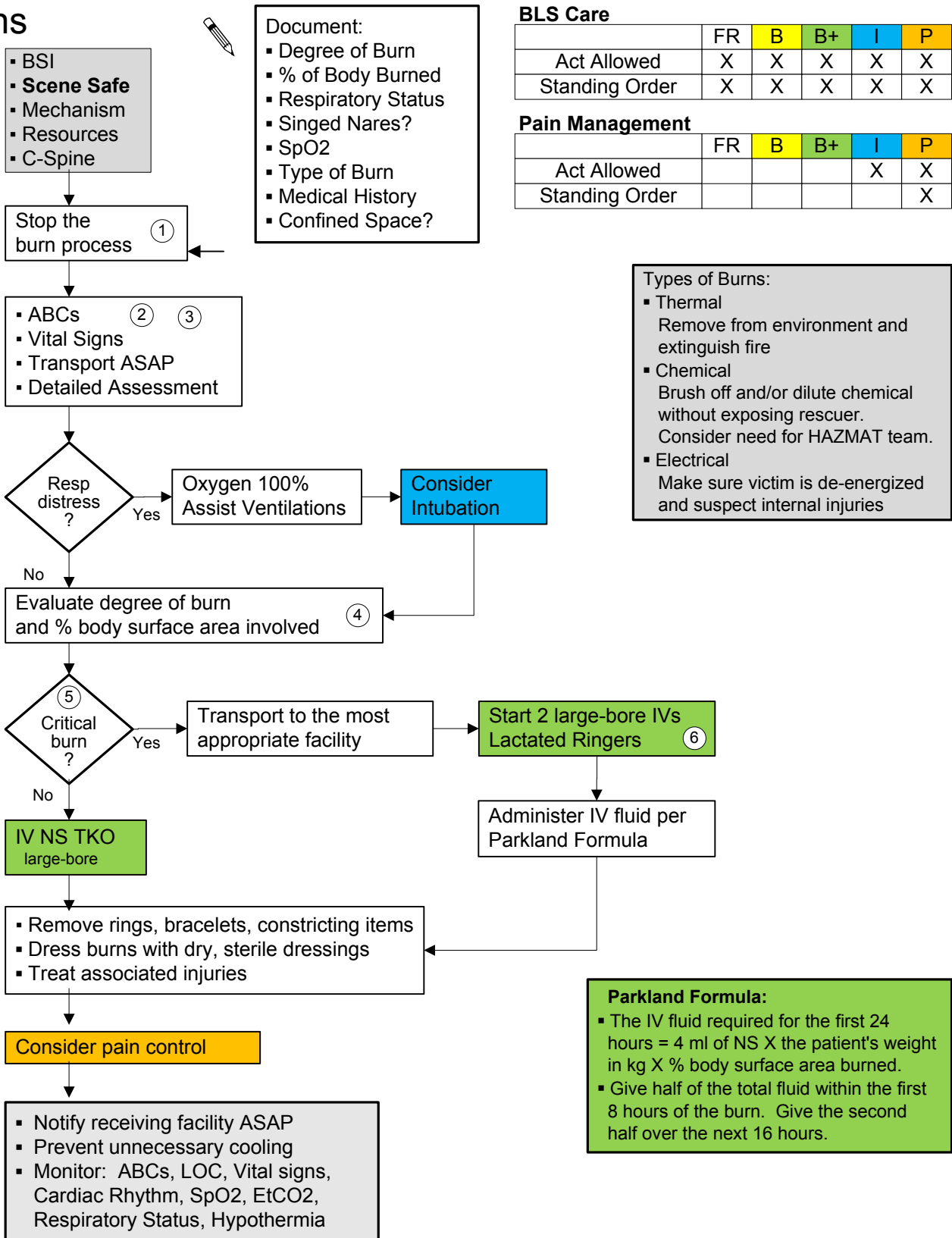
	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Contact On-line Medical Control





Burns



- 1 Remove clothes, flood with water ONLY if flames or smoldering is present.
- 2 Consider Carbon Monoxide poisoning if victim was within a confined space. If potential for CO poisoning exists administer Oxygen 100%.
- 3 If shock is present consider underlying causes.
- 4 Note: the patient's palm represents 1% of their BSA. Use this or 'rule-of-nines' as a reference.
- 5 Critical burn = 2nd degree >30% BSA, 3rd degree >10%, respiratory injury, involvement of face, hands, feet, or genitalia, circumferential burns, associated injuries, electrical or deep chemical burns, underlying medical history (cardiac, diabetes), age < 10 or > 50 years.
- 6 Start IVs within unburned areas if possible. Burned areas may be used if needed.

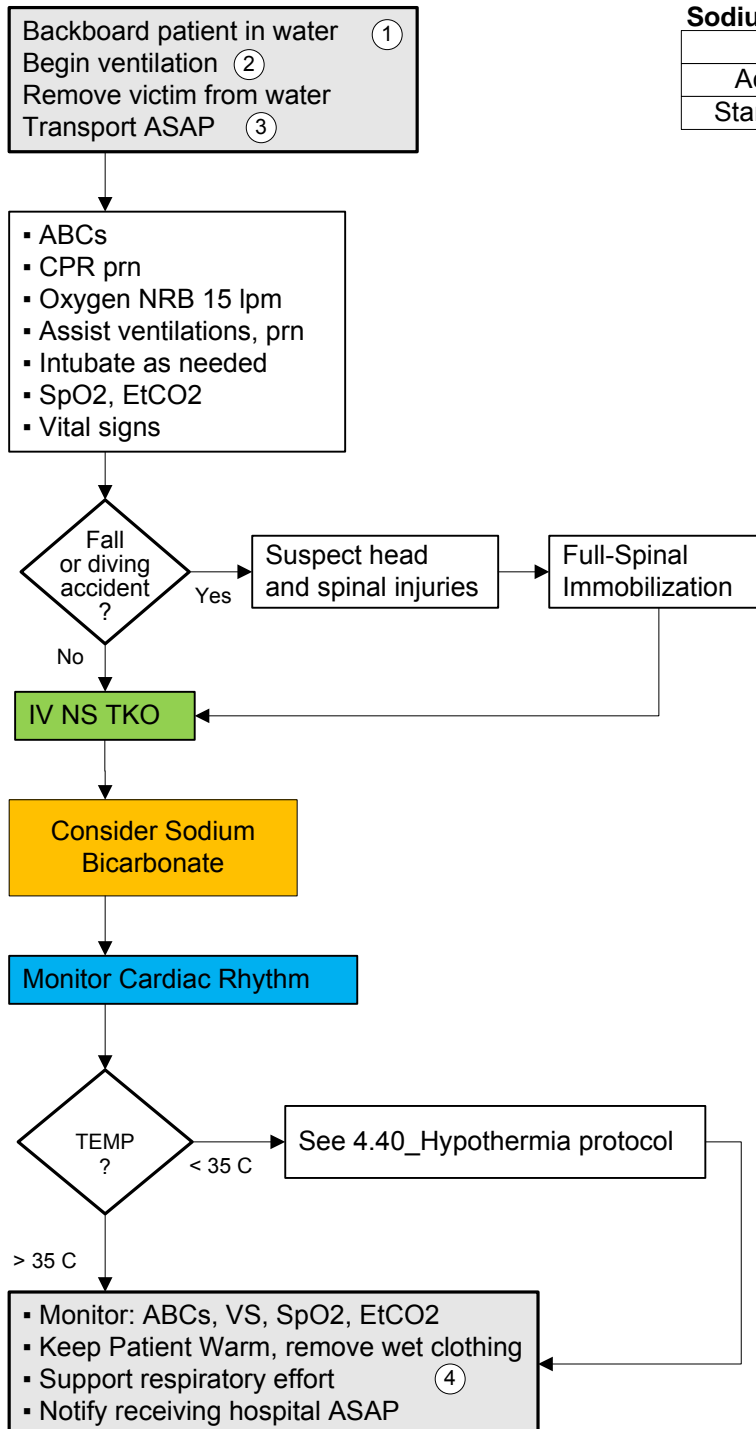
Drowning

Patient Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Sodium Bicarbonate

	FR	B	B+	I	P
Act Allowed				X	X
Standing Order					X



Document:

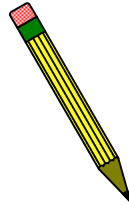
- Time Submerged
- Seizure Activity
- Water temperature
- Pregnancy
- SpO2, EtCO2
- Cardiac Rhythm
- Vital Signs

- 1 To be performed by a trained rescuer with appropriate equipment.
- 2 Ventilation should be initiated while the patient is being rescued.
- 3 All near-drowning victims should be examined by a physician.
- 4 Observe for Pulmonary Edema.

Hazardous Materials

BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



- BSI
- Scene Safe
- Resources

Document:

- Location of the incident
- Name of chemicals/material involved
- Number of injured/contaminated patients
- Triage information regarding injured patients
- Extent patients will be decontaminated in the field
- ETA for first arriving patient at hospital

Indications:

- Responding to reported and/or known hazardous material incident
- Vapor clouds, noxious odors, fire, smoke, leaking substances, frost lines on cylinders, sick personnel or bystanders, dead or distressed animals are present on or near scene

Precautions:

- If you can smell a noxious odor you are too close
- Use a safe approach. DON'T become a victim of the incident
- Select a location that is uphill and upwind of the incident
- Observe from a distance (use binoculars). Use the "thumb" technique for estimating distance
- If you are first on scene assume incident command and request a hazardous material response, turn over command to fire when they arrive
- If fire is first on scene, report to the incident commander
- Realize that you may have to withdraw, leaving patients to be decontaminated
- Without proper training and equipment, do not become involved in decontamination activities.

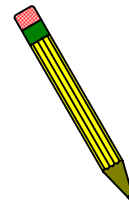
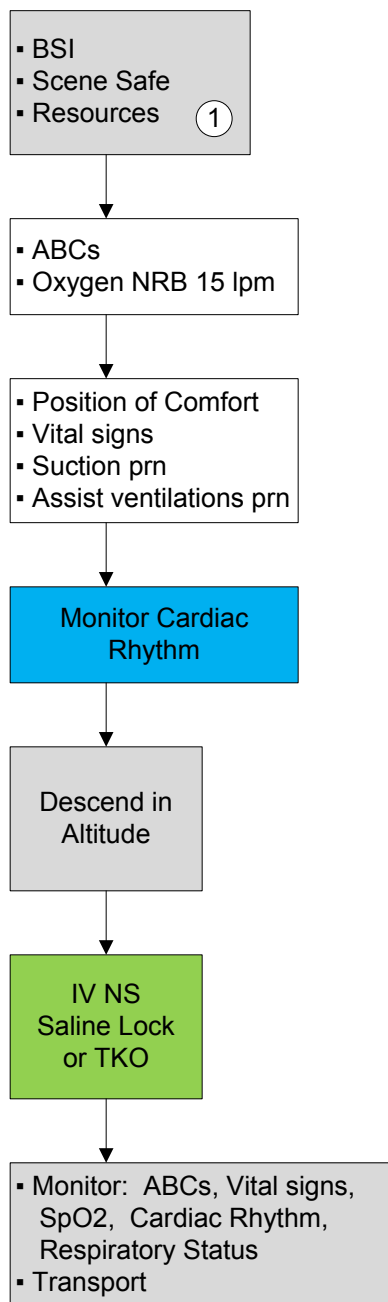
Procedure:

- Establish EMS operations in the COLD zone
- Report to the incident commander
- Be prepared to make a hasty retreat (park appropriately, don't get blocked)
- After scene size-up, provide the receiving hospital with the information listed in the Document box shown above.
- Let the decontamination team carry out assessment, treatment and decontamination. Patients should only be brought to the EMS unit after decontamination.
- Use On-line Medical Control and Poison Control to direct your treatment plan.

High Altitude Illness

BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



Document:

- History of recent travel
- History of DVT
- Cardiac History
- Respiratory History

Notes:

1 Be prepared to evacuate patient via stretcher

Hyperthermia

BLS Care with IV Therapy

	FR	B	B+	I	P
Act Allowed			X	X	X
Standing Order			X	X	X

- ABCs
- Oxygen via NC 2-6 lpm
- Assist ventilations as needed

- Move patient to a cool environment
- Detailed Assessment - Vital Signs

Pt temp >104°F/
40°C

Yes

- Begin active cooling...
- Remove clothes
- Use damp sheets
- Use cold packs
- Don't block natural evaporation

IV NS Fluid challenge...

- 20 mL/KG
- Monitor BP

BGL <60 mg/dl

Yes

Treat per 9.18_Dextrose protocol

Monitor:

- ABCs
- Vital signs
- LOC
- Cardiac Rhythm
- Signs of Heat exhaustion/stroke
- Anticipate Potential Seizure Activity

Document:

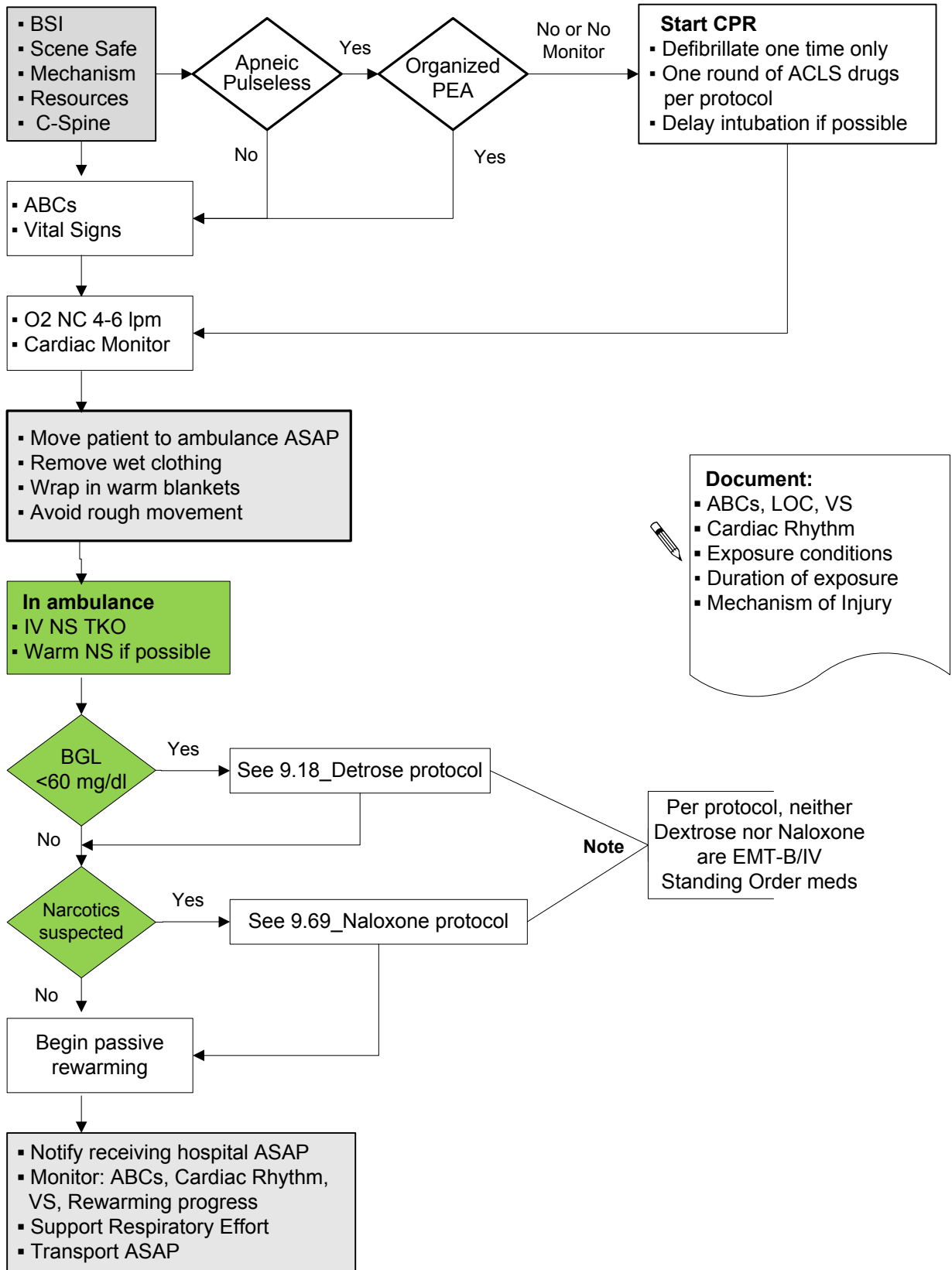
- Detailed Assessment
- Neurological Status
- Glasgow Coma Scale
- Temperature
- Clinical Response to Treatment
- IV Fluid Amount
- Cardiac Rhythm
- SpO2, Vital Signs

Hypothermia/Frostbite

Frostbite see page 2

BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

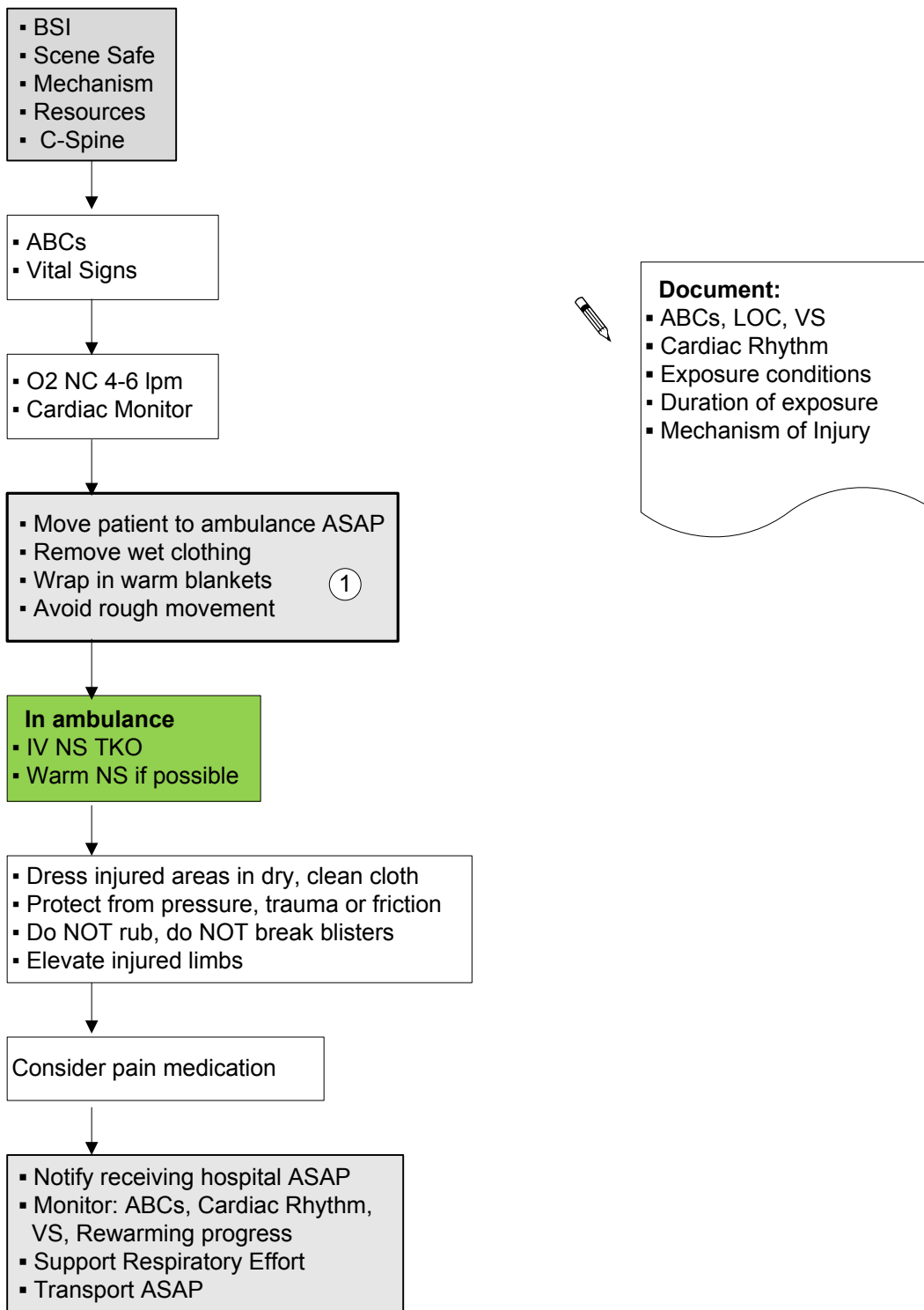


Hypothermia/Frostbite

Hypothermia see page 1

BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



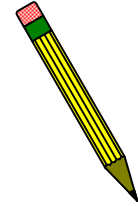
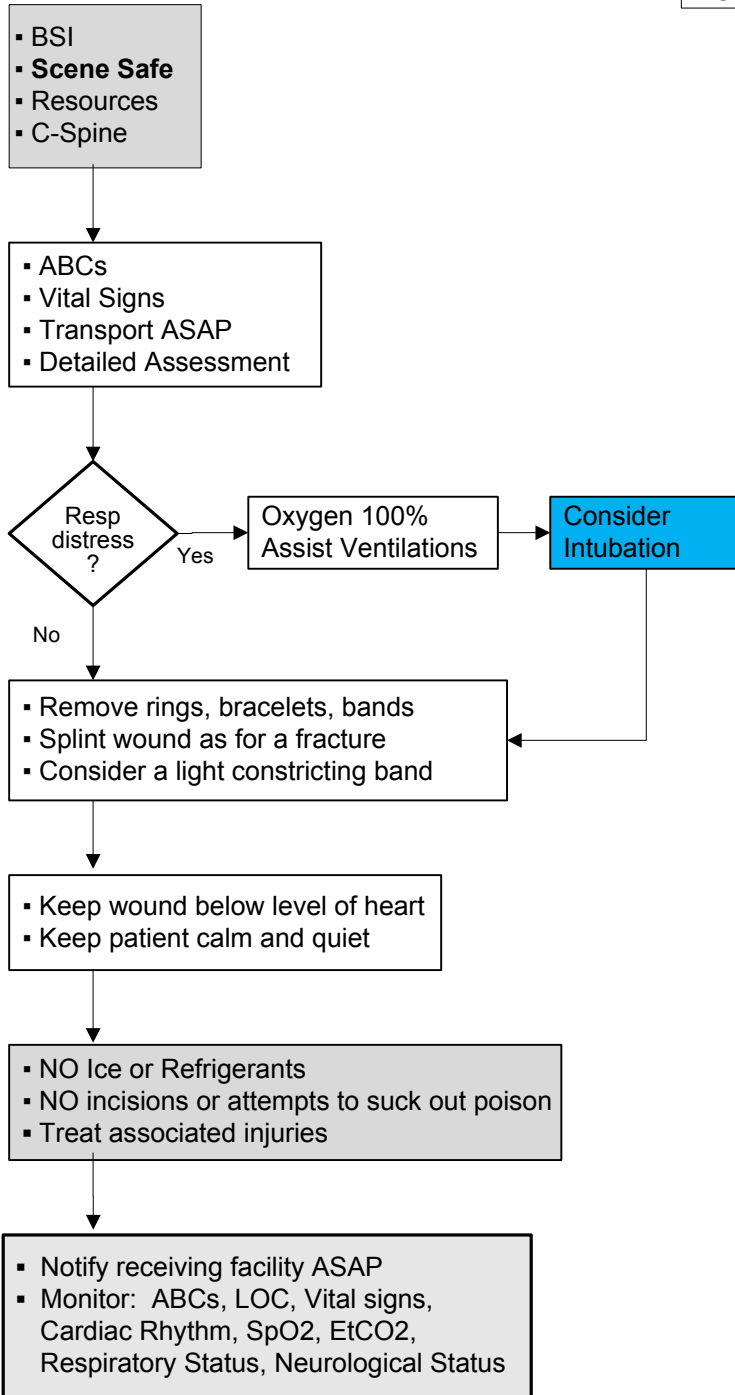
Note:

1 Do not allow active rewarming of injured areas if re-freezing is possible. Thawing is extremely painful and is best accomplished at the receiving hospital. Even long extrications are best accomplished with the injured area still frozen.

Snakebite

BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



Document:

- Type of snake
- Time of bite
- Bystander first aid given
- Signs and Symptoms

Abdominal Pain

Not related to pregnancy or trauma

BLS Care

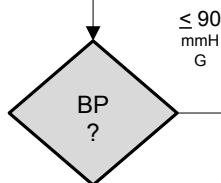
	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

- General Impression
- ABCs
- Mental Status
- Vital Signs
- Oxygen NC 2-4 lpm

- Detailed Assessment:
- Abdominal Exam ①
 - Consider cardiac monitor ②

Allow patient to assume position of comfort

Nothing by Mouth (NPO)



Establish IV NS
14-16 gauge
20 mL/kg bolus
titrate BP to 90 mmHg

Increase O2
NRB 15 lpm

> 90 mmHG

Establish IV NS TKO

- Monitor:
- ABCs
 - Vital Signs
 - LOC

Transport



Document:

- Abdominal Signs/SX
- Chest Pain?
- Cardiac Rhythm if Obtained
- Vital Signs
- Last Oral Intake
- Emesis/Stool

1 Abdominal Exam: Note pain (nature, duration, intensity on 1-10 scale, radiation). Observe for palpable mass, always palpate with care. Auscultate prior to palpation. Note associated signs & symptoms; (nausea, vomiting, bowel tones, guarding, rebound tenderness, distention). History: previous episodes, last meal, current medications, last menstrual period, possibility of pregnancy.

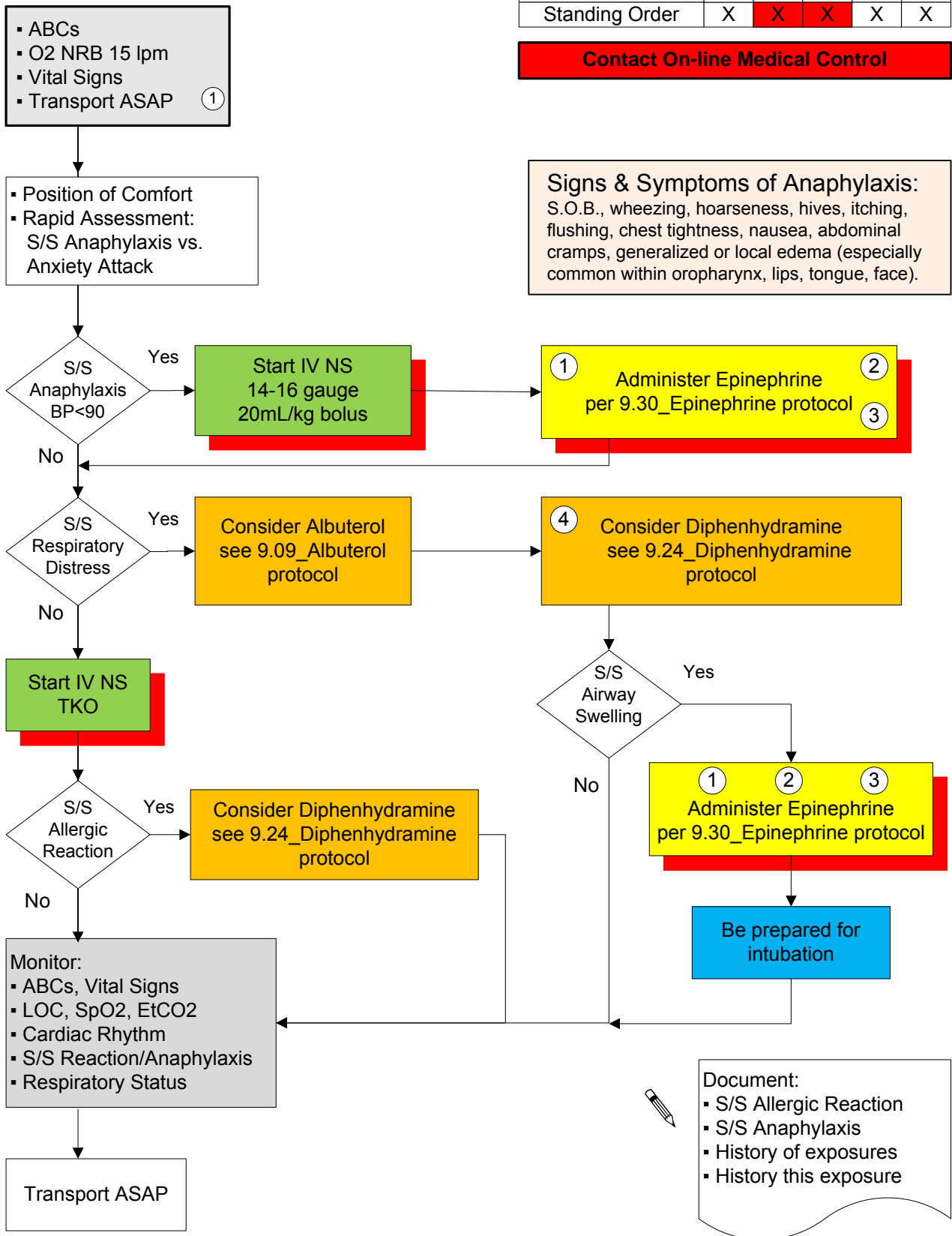
2 Be aware that ischemic cardiac pain can present as abdominal pain especially in older patients.

Allergic Reaction/Anaphylaxis

ALS/BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Contact On-line Medical Control



Signs & Symptoms of Anaphylaxis:
S.O.B., wheezing, hoarseness, hives, itching, flushing, chest tightness, nausea, abdominal cramps, generalized or local edema (especially common within oropharynx, lips, tongue, face).

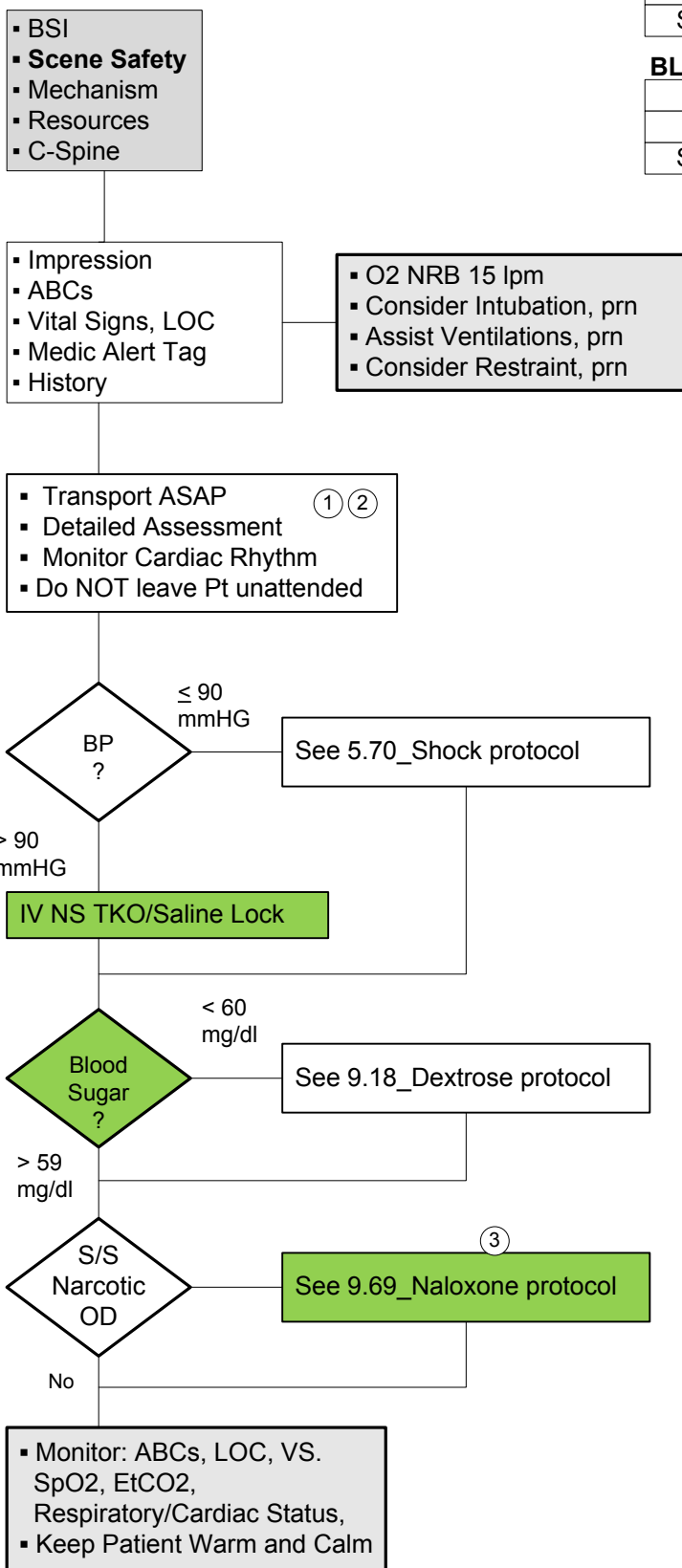
1 Two (2) dilution's of epinephrine are available: 1:1,000 is appropriate for SQ or IM injections, 1:10,000 is for IV or ETT use. Be sure to give the correct dose and dilution.

2 Epinephrine: pediatric dose = 0.01 mg/kg 1:1,000 SQ/l

3 Scope-of-Practice limits EMT-Basics to the use of an Epinephrine Auto-injector

4 Diphenhydramine (Benadryl): pediatric dose = 2 mg/kg IM or slow IV.

Altered Mentation/Coma



BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

BLS Care with IV Therapy

	FR	B	B+	I	P
Act Allowed			X	X	X
Standing Order			X	X	X

Possible causes:

- Head Injury
- Hypoxia
- Diabetes
- Overdose
- Hypothermia
- Cardiac Arrest
- Heat Stroke
- Seizure
- Hypertension
- Shock

Document:

- Glasgow Coma Scale
- Clinical Response to Dextrose or Narcan
- Blood Glucose Level
- SpO2
- IV Fluid Totals
- Medical History
- Onset of S/S
- Time of onset

Glasgow Coma Scale

Eye	Spontaneous	4
Opening	To Voice	3
	To Pain	2
Best Verbal Response	None	1
	Oriented	5
	Confused	4
Response	Inappropriate words	3
	Incomprehensible words	2
	None	1
Best Motor Response	Obeys Commands	6
	Localizes Pain	5
Response	Withdraws (Pain)	4
	Flexion	3
	Extension	2
	None	1

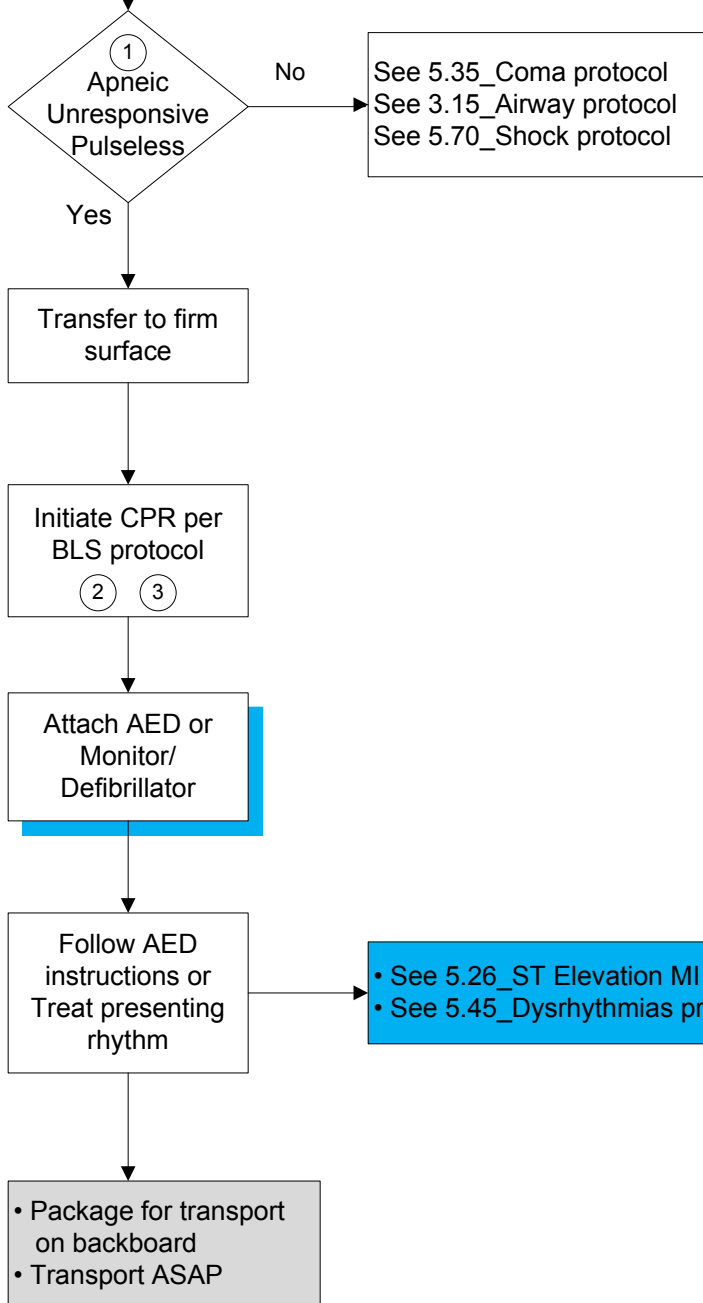
1 Detailed Assessment: Glasgow Coma Scale. Check for: odor on breath, needle tracks, constricted pupils, and evidence of trauma.

2 Observe environment closely for signs of potential overdose.

3 Be prepared to restrain combative patient.

Cardiac Arrest

- BSI
- Scene Safety
- Resources
- Mechanism
- C-Spine



BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

ALS Care

	FR	B	B+	I	P
Act Allowed				X	X
Standing Order				X	X

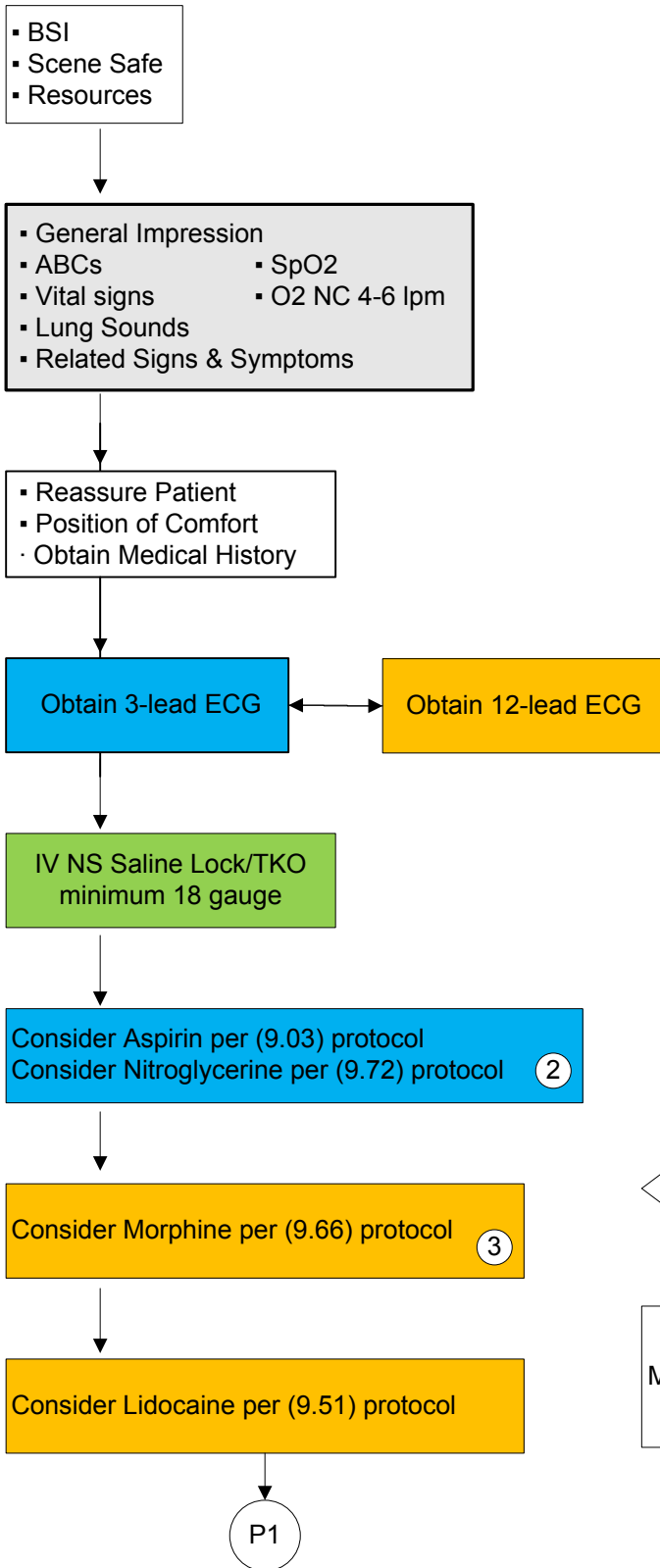
Document:

- Cardiac History
- History of this event
- Surroundings (drugs, etc.)
- Environment (temperature).

Notes:

1. Be sure to recheck patient status even if CPR is already in progress upon arrival.
2. Before initiating CPR consider 2.10_Death-in-the-Field protocol
3. Pediatric resuscitation is covered in 7.20_Neonatal and 7.25_Infant/Child Resuscitation

Chest Pain



BLS Care with IV Therapy

	FR	B	B+	I	P
Act Allowed			X	X	X
Standing Order			X	X	X

ALS Care

	FR	B	B+	I	P
Act Allowed				X	X
Standing Order				X	X

Acute Myocardial Infarction

Anteroseptal Wall:

- ST elevation in leads V1-V2

Anterior Wall: ①

- ST elevation in leads V3-V4

Inferior Wall:

- ST elevation in leads II, III, aVF

Lateral Wall:

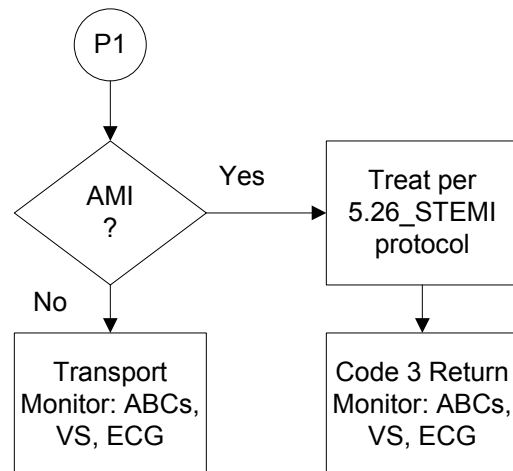
- ST elevation in leads I, aVL, V5-6

Posterior Wall:

- ST depression and tall, broad (>0.04 sec) R wave in leads V1 and V2 (reciprocal changes)

Document:

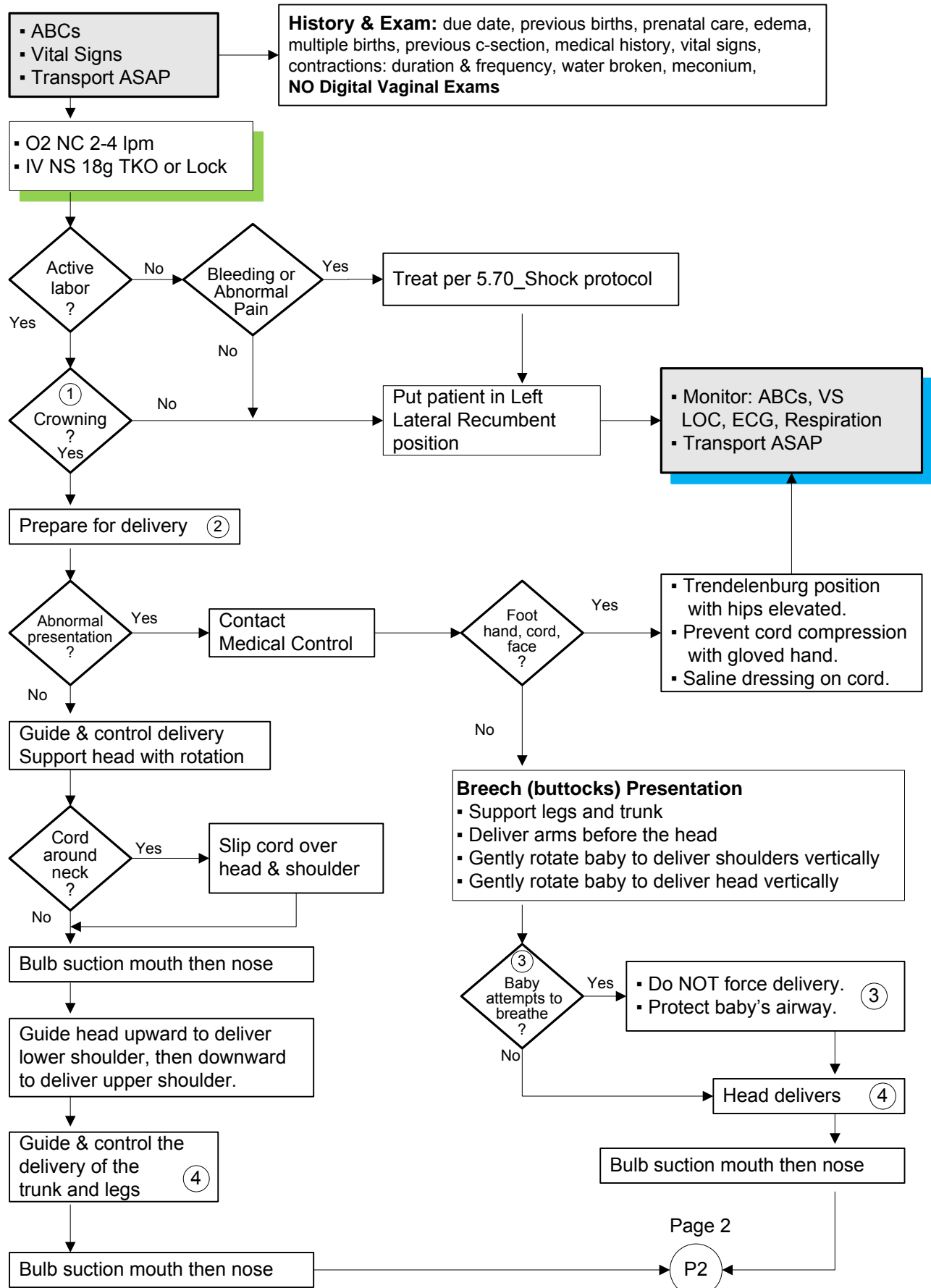
- ABCs
- Medical History
- Signs & Symptoms
- ECG 3/12-lead
- SpO2, VS, EtCO2
- Color, Diaphoresis
- Lung Sounds



1 With inferior wall MI rule-out Right Ventricular MI with V4R lead ECG
 2 Nitroglycerin SL sublingual is contraindicated if systolic BP < 90 mmHg.
 3 Morphine is indicated for continuing pain and acute pulmonary edema.

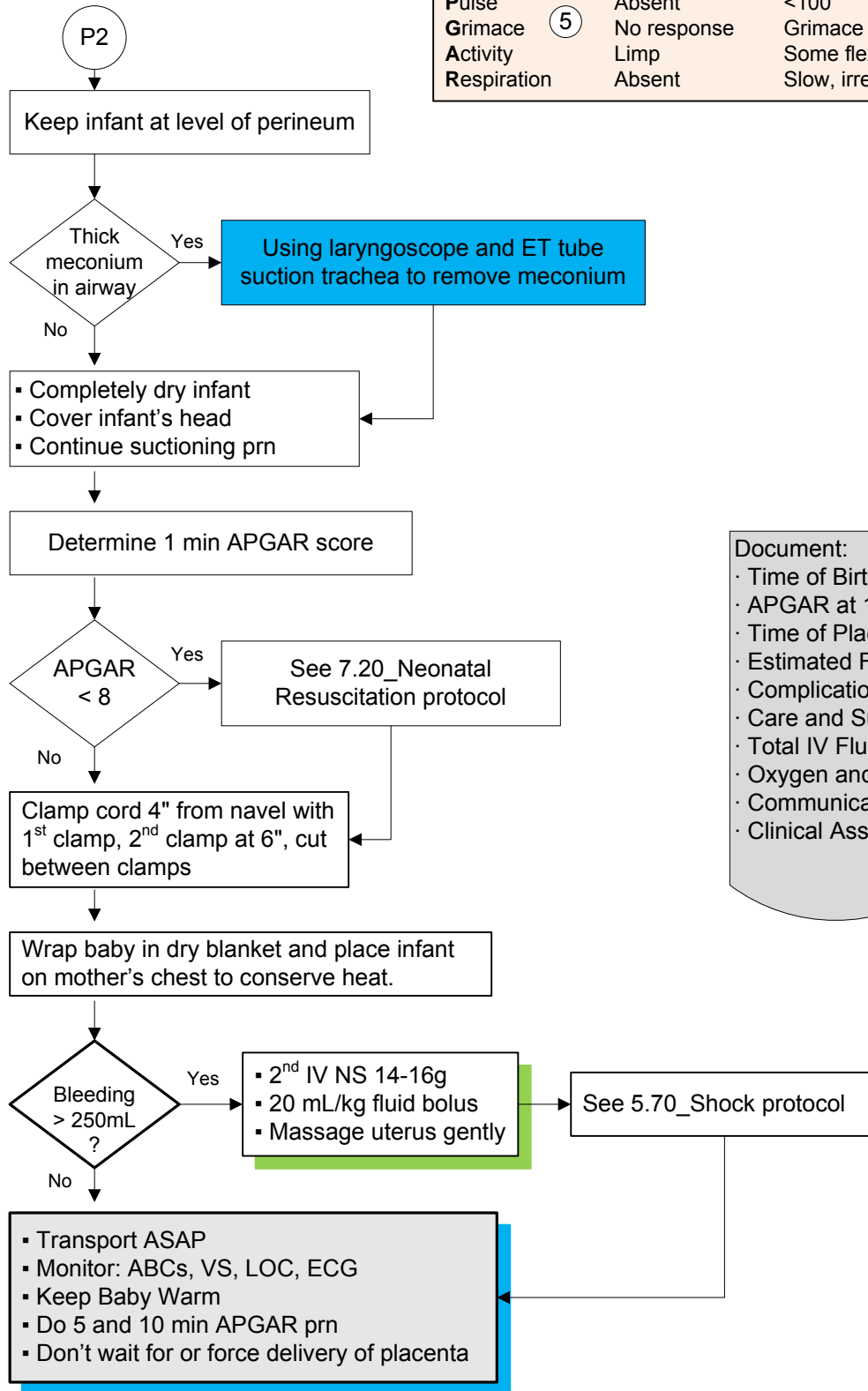
BLS Care

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



Childbirth – Page 2

Apgar Score	0	1	2
Appearance	Blue, pale	Body pink	Completely pink
Pulse	Absent	<100	>100
Grimace (5)	No response	Grimace	Cough, sneeze
Activity	Limp	Some flexion	Active
Respiration	Absent	Slow, irregular	Good, crying



Document:

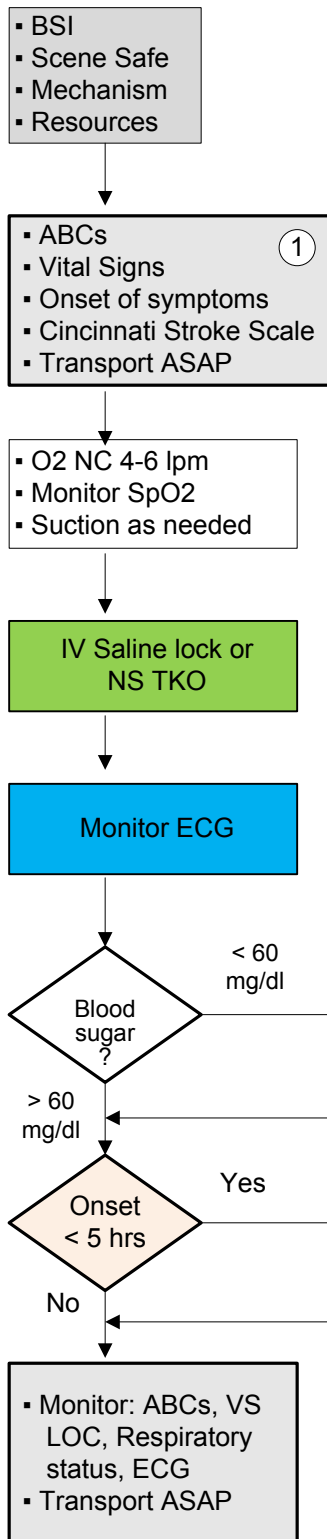
- Time of Birth
- APGAR at 1 Min and 5 Min
- Time of Placental Delivery
- Estimated Fluid and Blood Loss
- Complications if any
- Care and Supportive Measures
- Total IV Fluids Infused
- Oxygen and Other Medications
- Communication with Medical Control
- Clinical Assessment and VS

- 1 Crowning may first appear during a contraction. Look for crowning between and during contractions.
- 2 Deliver baby on the scene ONLY if delivery is eminent. Sterile procedures if possible.
- 3 If the babies head does not deliver and the baby begins to breathe with its face pressed against the vaginal wall, place a gloved hand in the vagina with the palm toward the babies face. Form a "V" with the index and middle finger on either side of the infant's nose and push the vaginal wall away from the infant's face to allow unrestricted respiration.
- 4 Note exact time of birth.
- 5 Grimace: response to suctioning. Activity: response to drying/stimulating/holding.

CVA - Stroke

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



The Cincinnati Prehospital Stroke Scale

(Kothari R, et al. *Acad Emerg Med.* 1997;4:986-990.)

Facial Droop (have patient show teeth or smile):

- **Normal** — both sides of face move equally
- **Abnormal** — one side of face does not move as well as the other side

Arm Drift (patient closes eyes and holds both arms straight out for 10 seconds):

- **Normal** — both arms move the same or both arms do not move at all (other findings, such as pronator grip, may be helpful)
- **Abnormal** — one arm does not move or one arm drifts down compared with the other

Abnormal Speech (have the patient say "you can't teach an old dog new tricks"):

- **Normal** — patient uses correct words with no slurring
- **Abnormal** — patient slurs words, uses the wrong words, or is unable to speak

Interpretation: If any 1 of these 3 signs is abnormal, the probability of a stroke is 72%.

American Stroke Association
A Division of American Heart Association

Document:

- ABCs
- Vital Signs, ECG, BGL
- Cincinnati Stroke Scale
- SpO2
- Neurologic Deficits
- Onset of Symptoms

1 Finding out when the patient first experienced signs and symptoms of a stroke is critical in determining if the patient is a candidate for thrombolytic therapy. Also, a stroke patient may be aphasic (unable to speak) but still be completely alert and aware of what is happening—talk to your patient.

Hypertension

Not related to Pregnancy or Head Injury

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Contact On-line Medical Control

Hypertensive Crisis:

- Confirmed Diastolic BP > 120 mmHg

With Associated Symptoms:

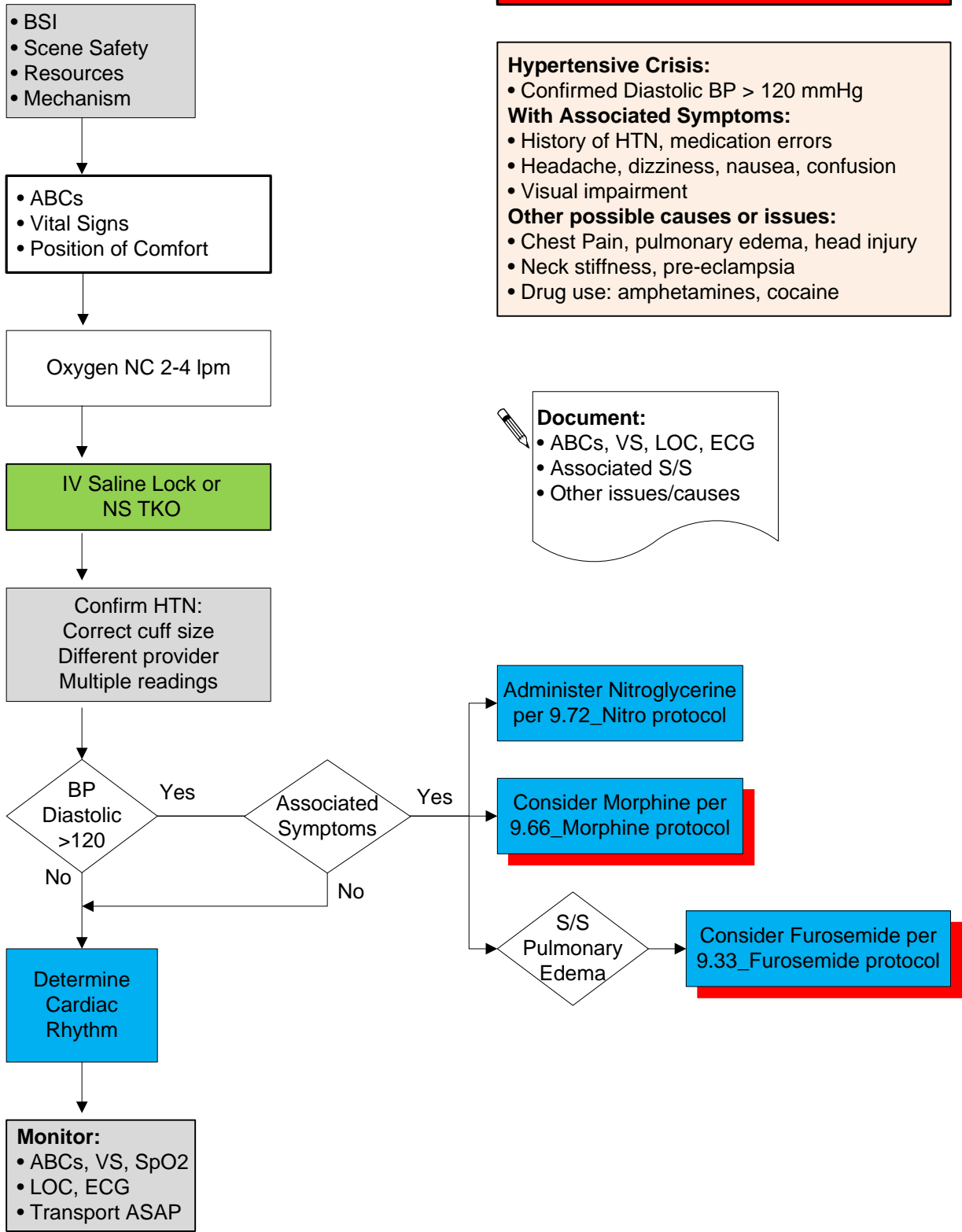
- History of HTN, medication errors
- Headache, dizziness, nausea, confusion
- Visual impairment

Other possible causes or issues:

- Chest Pain, pulmonary edema, head injury
- Neck stiffness, pre-eclampsia
- Drug use: amphetamines, cocaine

Document:

- ABCs, VS, LOC, ECG
- Associated S/S
- Other issues/causes



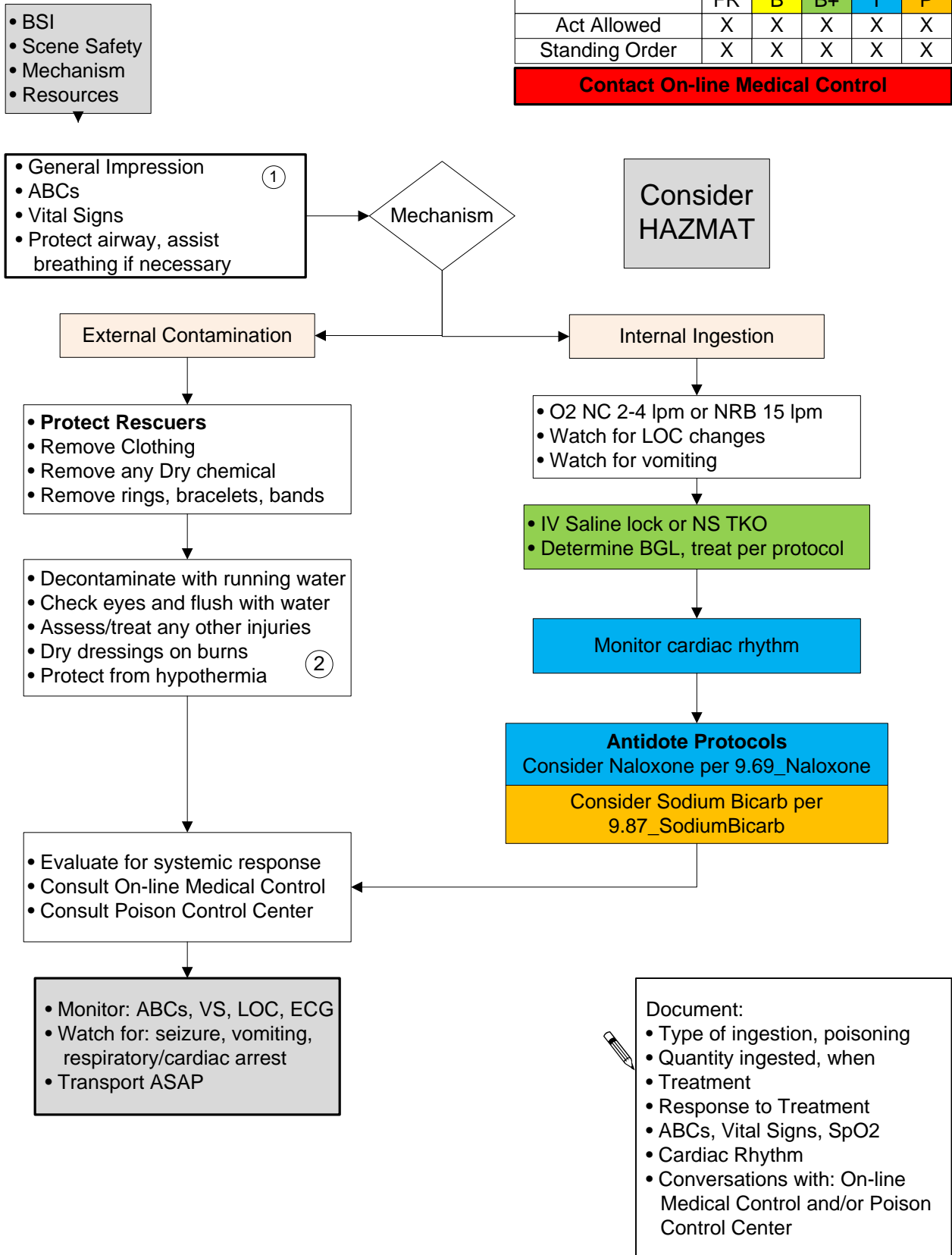
Poison and Overdose

General Management

Rocky Mtn Poison Control Center
1-800-222-1222

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X
Contact On-line Medical Control					

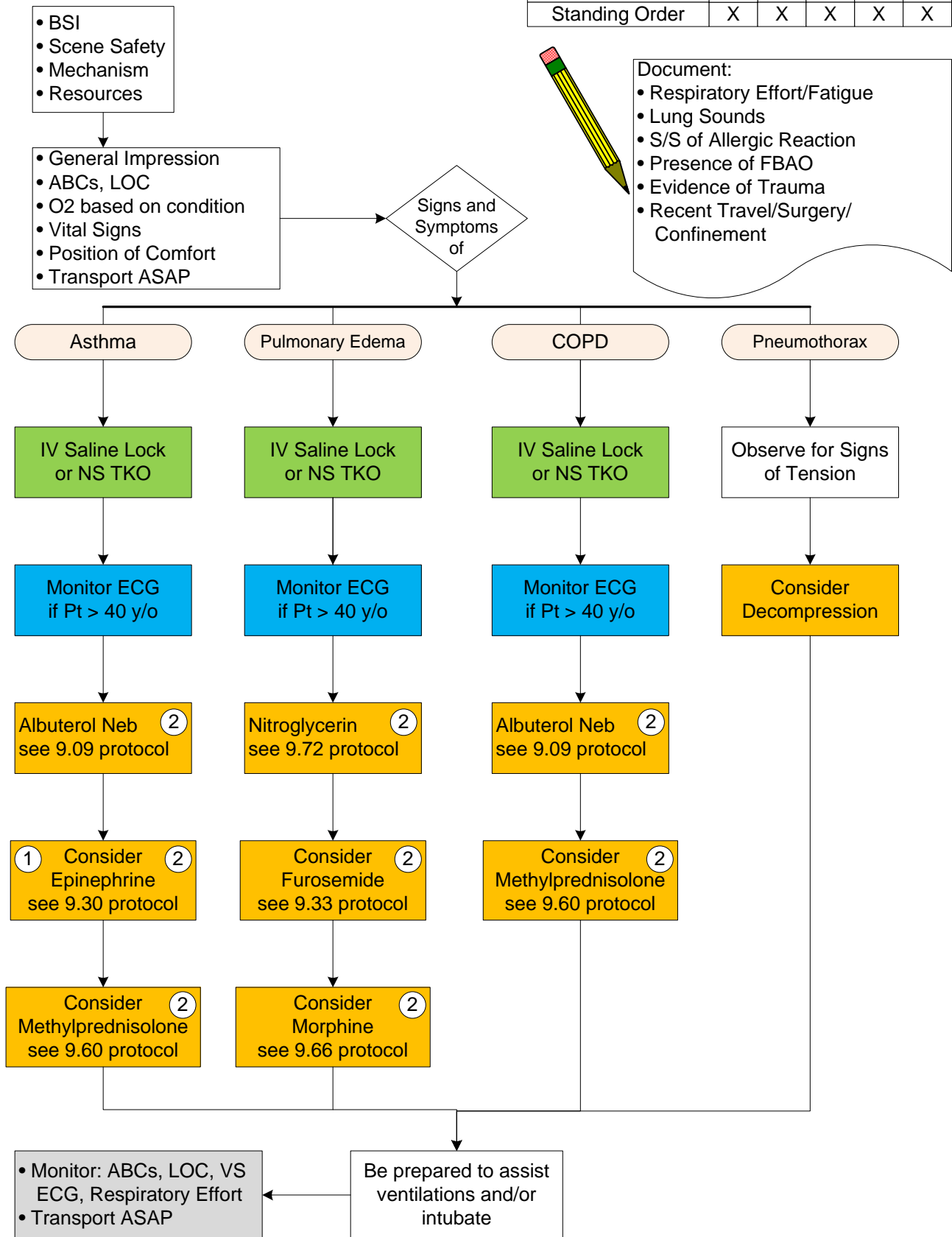


1 Observe environment closely for signs of potential overdose or accidental ingestion.
2 Water is contraindicated for these contaminants: phosphorous, sodium metal, phenol, hydrochloric acid, sulfuric acid, dry lime. Contact HAZMAT or On-line Medical Control.

Respiratory Distress

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



Notes:

- 1 EMT-Basics may assist patient with their EpiPen under direct verbal orders from On-line Medical Control.
- 2 EMT-Intermediates may administer these meds under direct verbal orders from On-line Medical Control.

Seizures

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

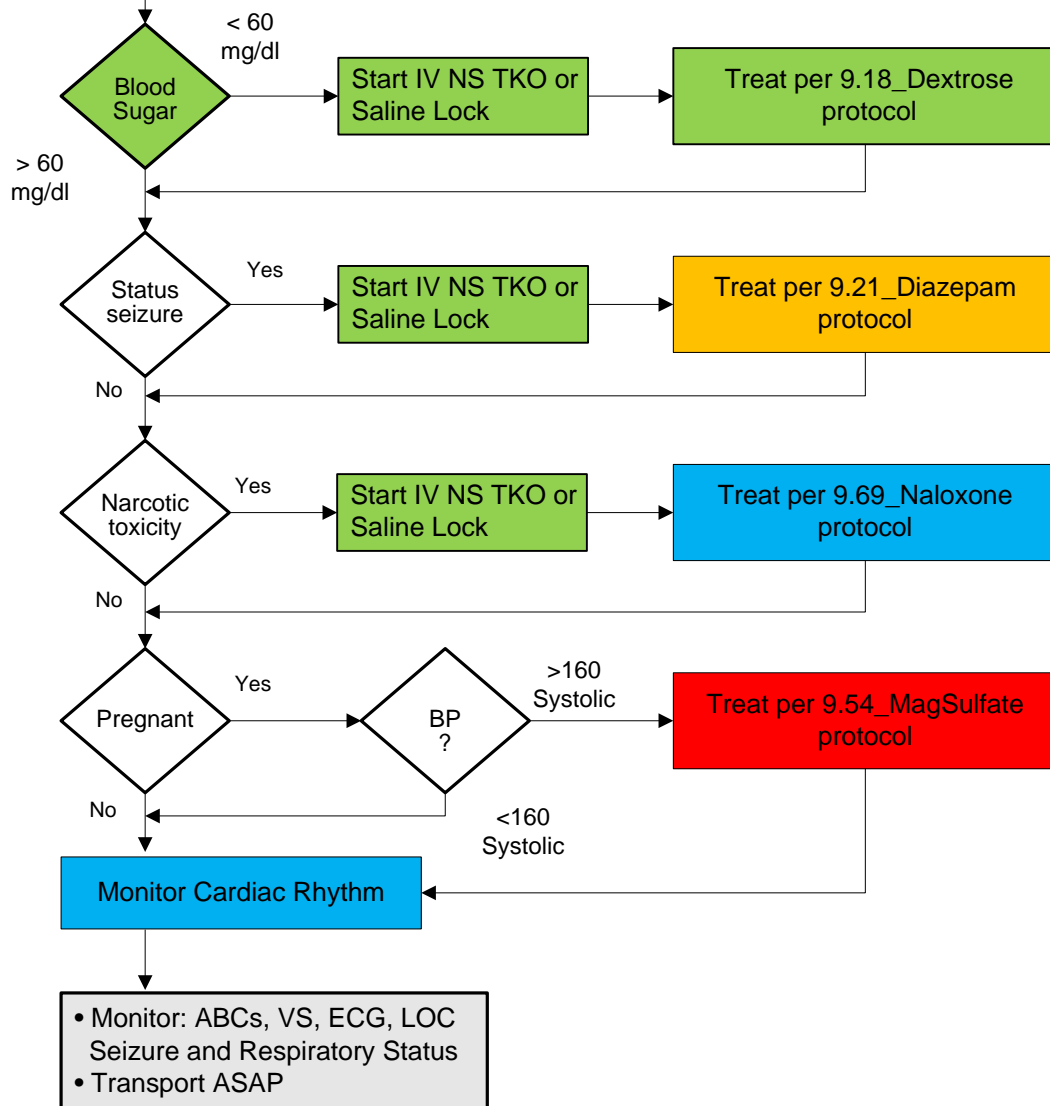
Contact On-line Medical Control

- BSI
- Scene safety
- Mechanism
- Resources
- C-spine

- ABCs
- Consider Nasopharyngeal Airway
- Oxygen NC 2-4 lpm
- C-Spine precautions as needed
- Vital Signs at first opportunity
- Suction as needed

- Protect patient from injury during and after seizure.
- Place in lateral recumbent position if trauma absent.
- Don't force anything into patient's mouth.

- Document:**
- ABCs, VS, ECG
 - Seizure history
 - Activity During Seizure
 - Duration of Seizure
 - Duration of Postictal Phase
 - Incontinence
 - Oral Trauma
 - Air/patient temperature
 - ETOH use/withdrawal
 - Drug use/abuse

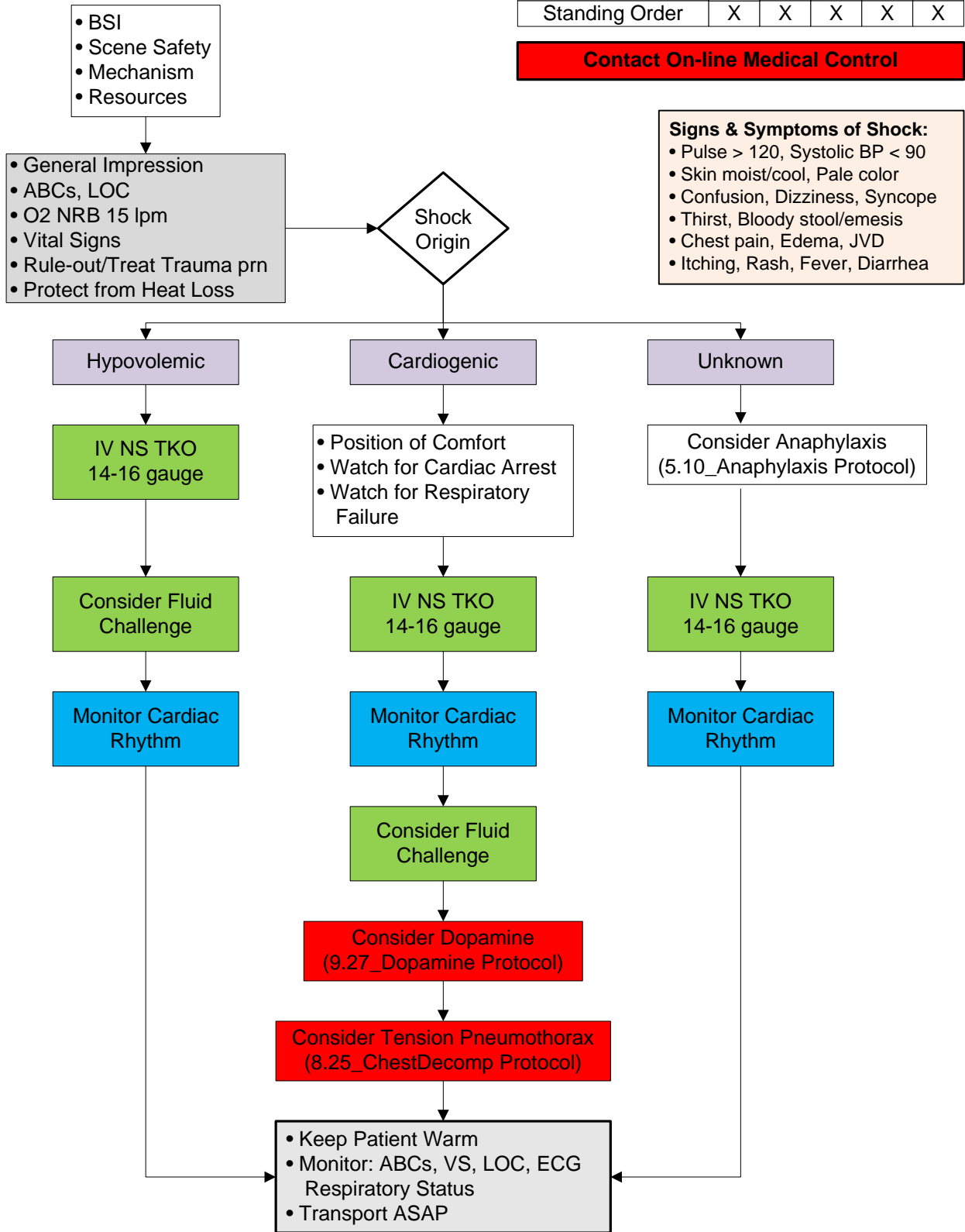


Shock – Medical

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Contact On-line Medical Control



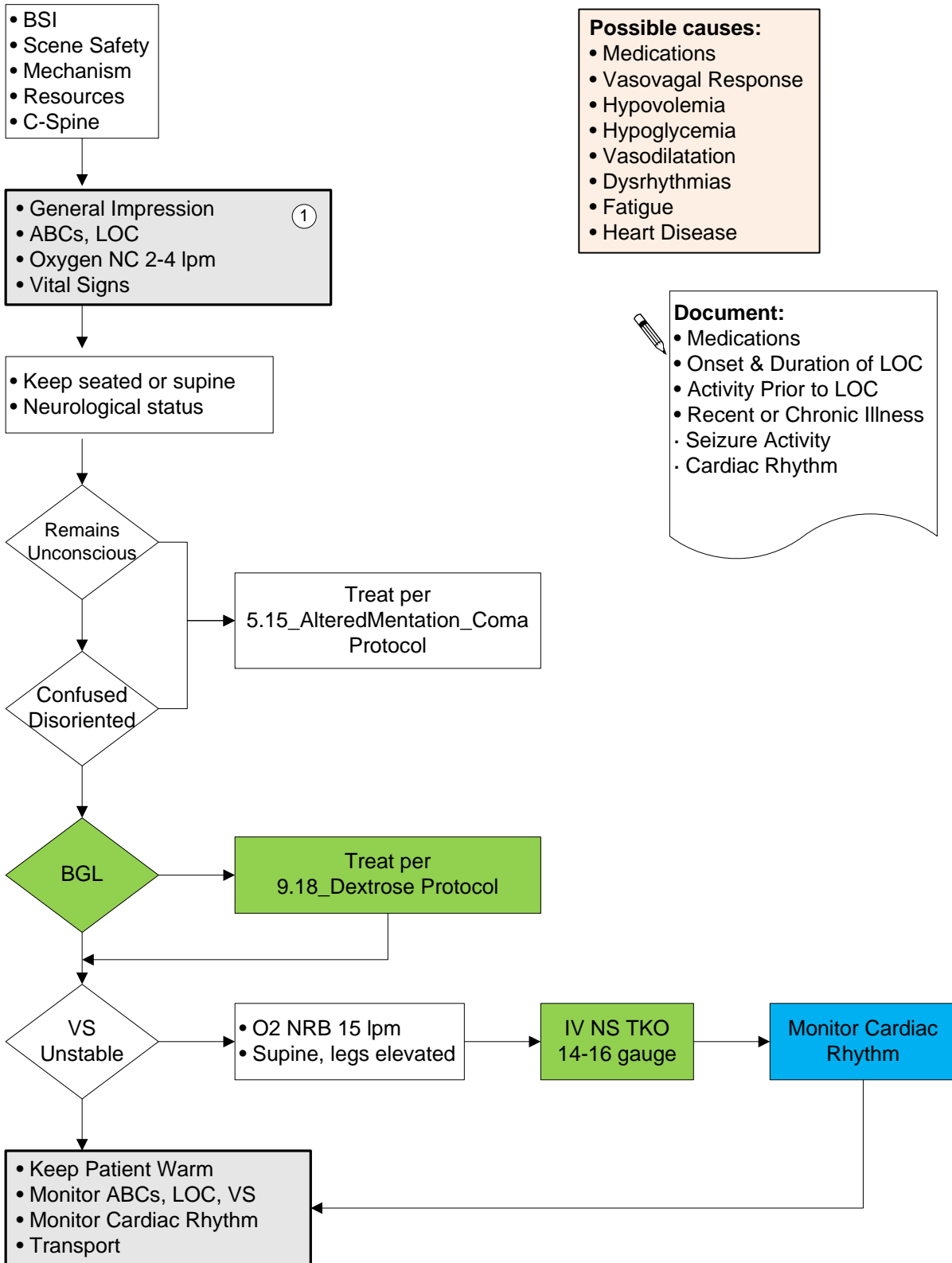
Document:

- ABCs, Vital Signs, LOC
- Quality of Pulses
- Respiratory Effort, Lung Sounds
- Signs & Symptoms of Shock
- Cardiac Rhythm

Syncope

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



- Possible causes:**
- Medications
 - Vasovagal Response
 - Hypovolemia
 - Hypoglycemia
 - Vasodilatation
 - Dysrhythmias
 - Fatigue
 - Heart Disease

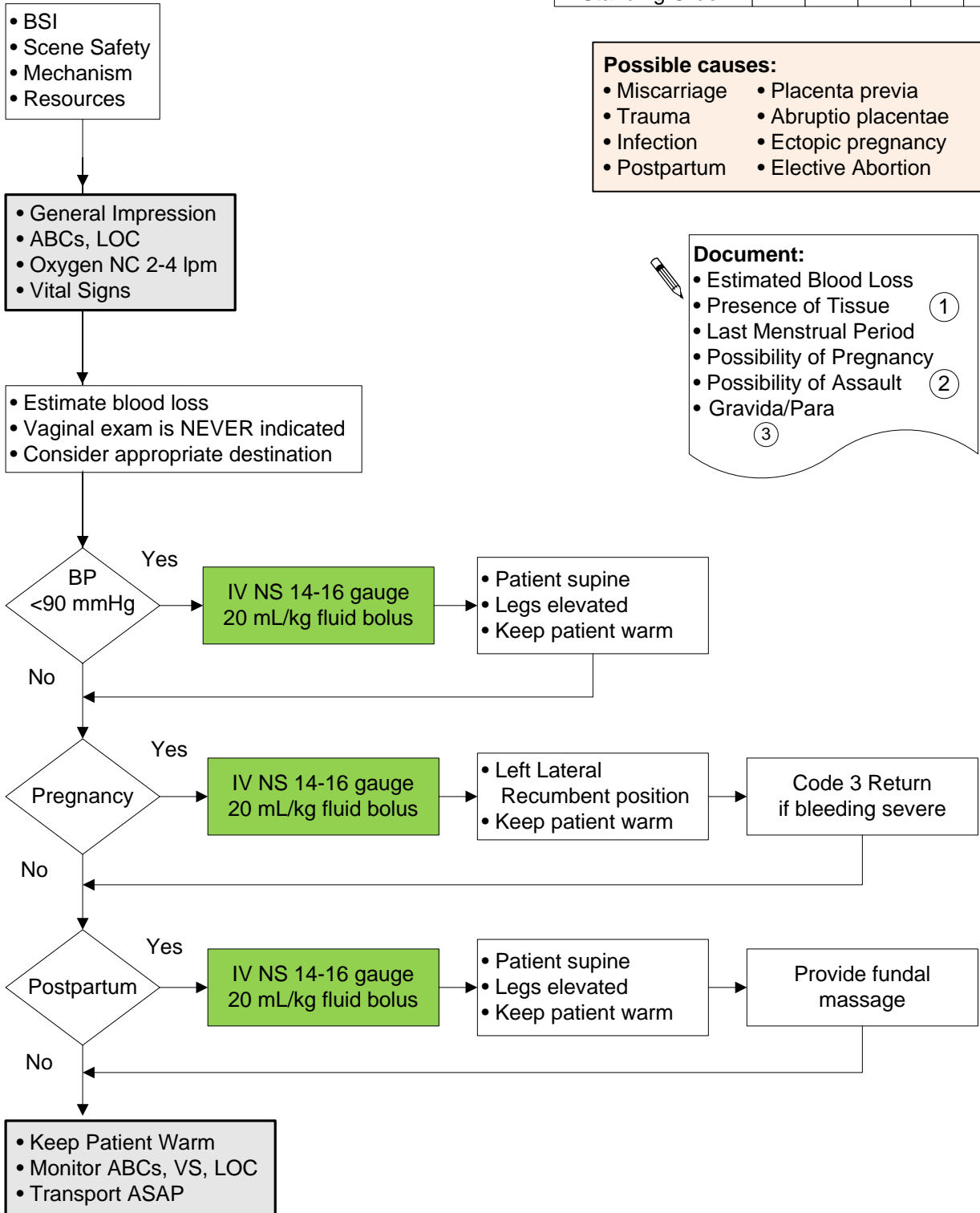
- Document:**
- Medications
 - Onset & Duration of LOC
 - Activity Prior to LOC
 - Recent or Chronic Illness
 - Seizure Activity
 - Cardiac Rhythm

1 Take Cervical-Spine precautions if associated with fall or trauma.

Vaginal Bleeding

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



1 Collect tissue fragments if present.

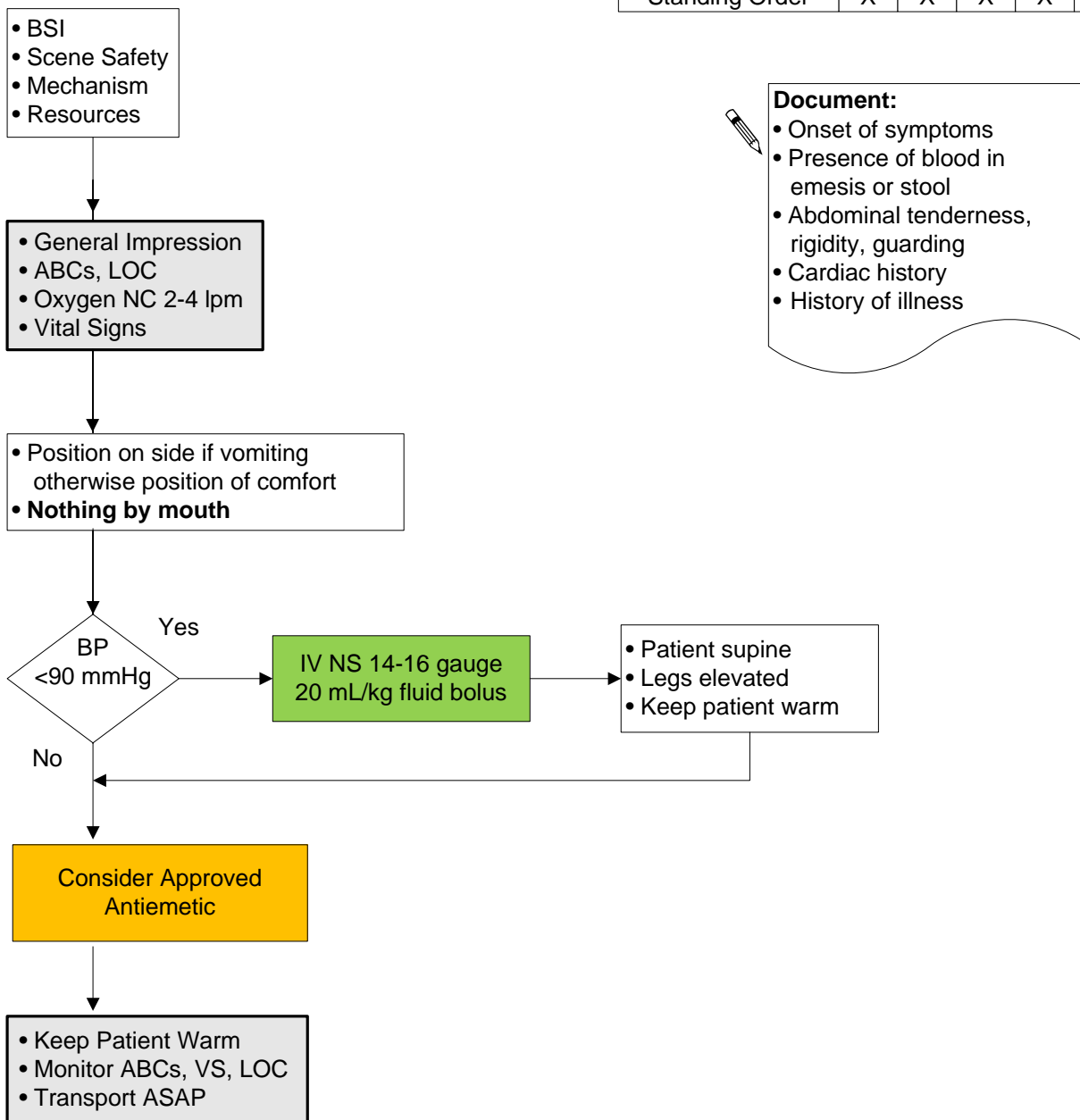
2 If possibility of assault exists maintain chain of evidence and, If possible, have a female attendant in the patient care area.

3 Gravida/Para: If pregnant, record the number of times the patient states she has been pregnant (Gravida), including this pregnancy and the number of viable births (Para) she has delivered.

Vomiting and Diarrhea

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



Abdominal Injury

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Contact On-line Medical Control

- BSI
- Scene Safety
- Mechanism
- Resources
- C-Spine

- General Impression
- ABC's, LOC
- Oxygen NC 2-4 lpm
- Frequent Vital Signs
- Prepare for immediate transport

Control any life threatening airway, breathing, bleeding problems first

Establish IV access, NS TKO 14-16 gauge, 2nd line if MOI significant

Penetrating Trauma

Yes

Cover wounds and viscera with saline moistened gauze dressings

Do Not attempt to repack exposed viscera

Code-3-Return is indicated

No

BP <90mmHg

Yes

- Administer fluid bolus 20 mL/kg
- Repeat as needed

Code-3-Return is indicated

No

- Monitor: ABCs, LOC, VS, Distal PMS
- Transport ASAP

Document:

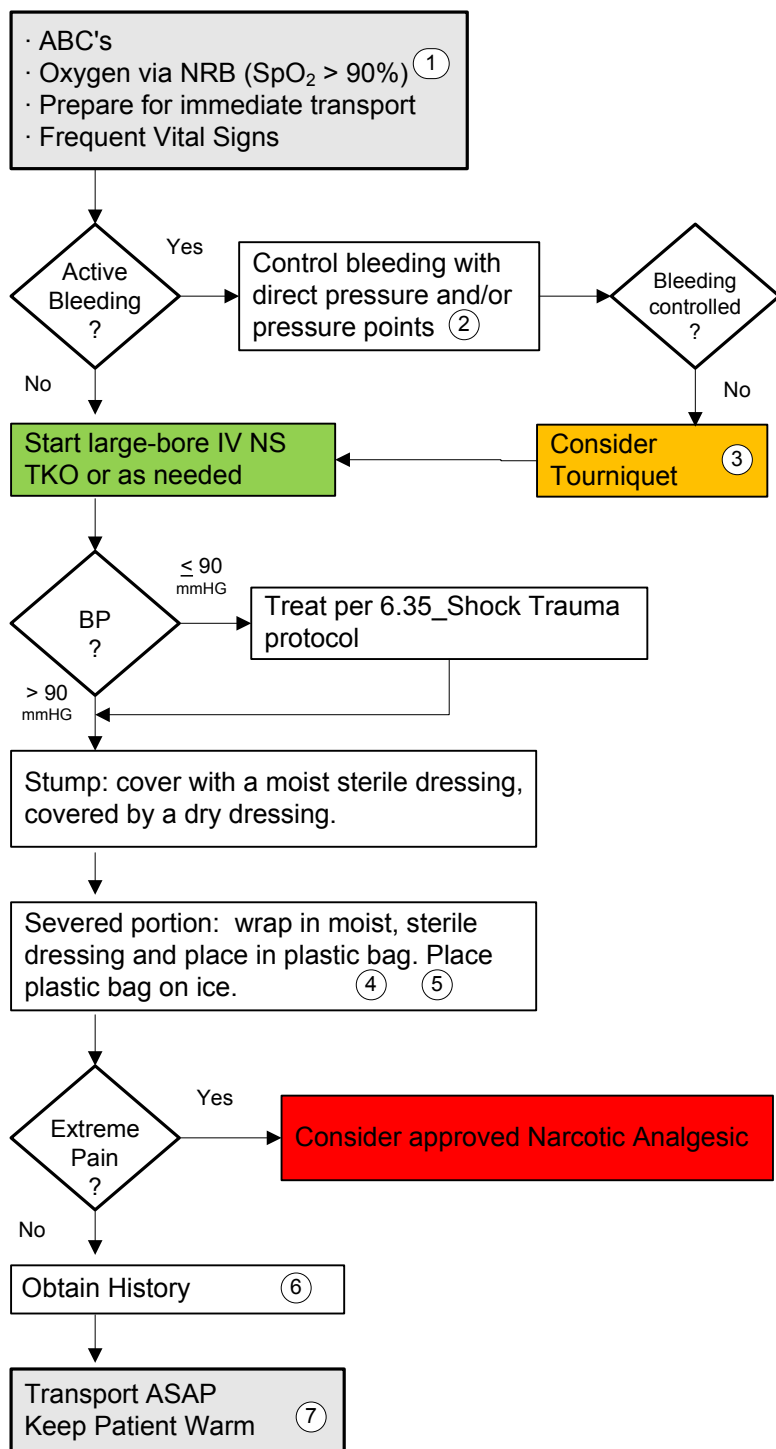
- Mechanism of Injury
- Time of Injury
- Last Meal
- **Penetrating Trauma**
 - Weapon / Projectile
 - Trajectory
- **Blunt Trauma**
 - Condition of Vehicle
 - Speed / Ejection
 - Airbag Deployment
 - Restraints / Helmets Used

Amputation

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Contact On-line Medical Control



Document:

- Trauma Involved
- Mechanism of Injury
- Time of Injury
- Current Medications
- Last Meal
- Vital Signs, SpO2
- Treatment

1 Administer higher concentrations if needed. Use a nonrebreather mask if active bleeding is present or if the original blood loss was significant.

2 Use pressure point proximal to site if direct pressure does not control the bleeding.

3 A tourniquet may be indicated.

4 Keep severed part moist. Do not allow to soak in a solution.

5 If transport delayed or otherwise extensive (entrapped patient, etc.), consider air transport and/or transporting severed part before patient, to allow early examination and surgical preparation for reimplantation.

6 History: note time of amputation, mechanism involved, current medications, bleeding disorders. Exam: note anatomical location of amputation. Estimate total blood loss.

7 Do not delay transport at any time in this protocol.

Chest Injury

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Contact On-line Medical Control

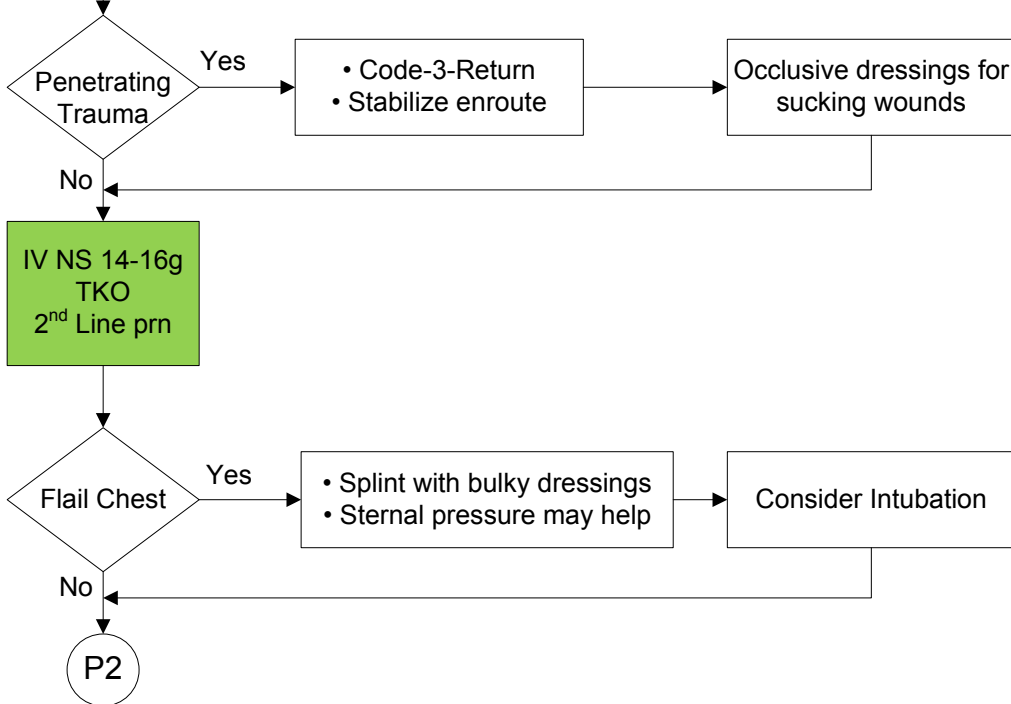
- BSI
- Scene Safety
- Mechanism
- Resources
- C-Spine

- General Impression
 - C-Spine Precautions, prn
 - ABC's, LOC, VS
 - Oxygen NRB 15 lpm
 - Support Respiration prn
 - Control exsanguinating hemorrhage
 - Prepare for immediate transport
- 1

Document:

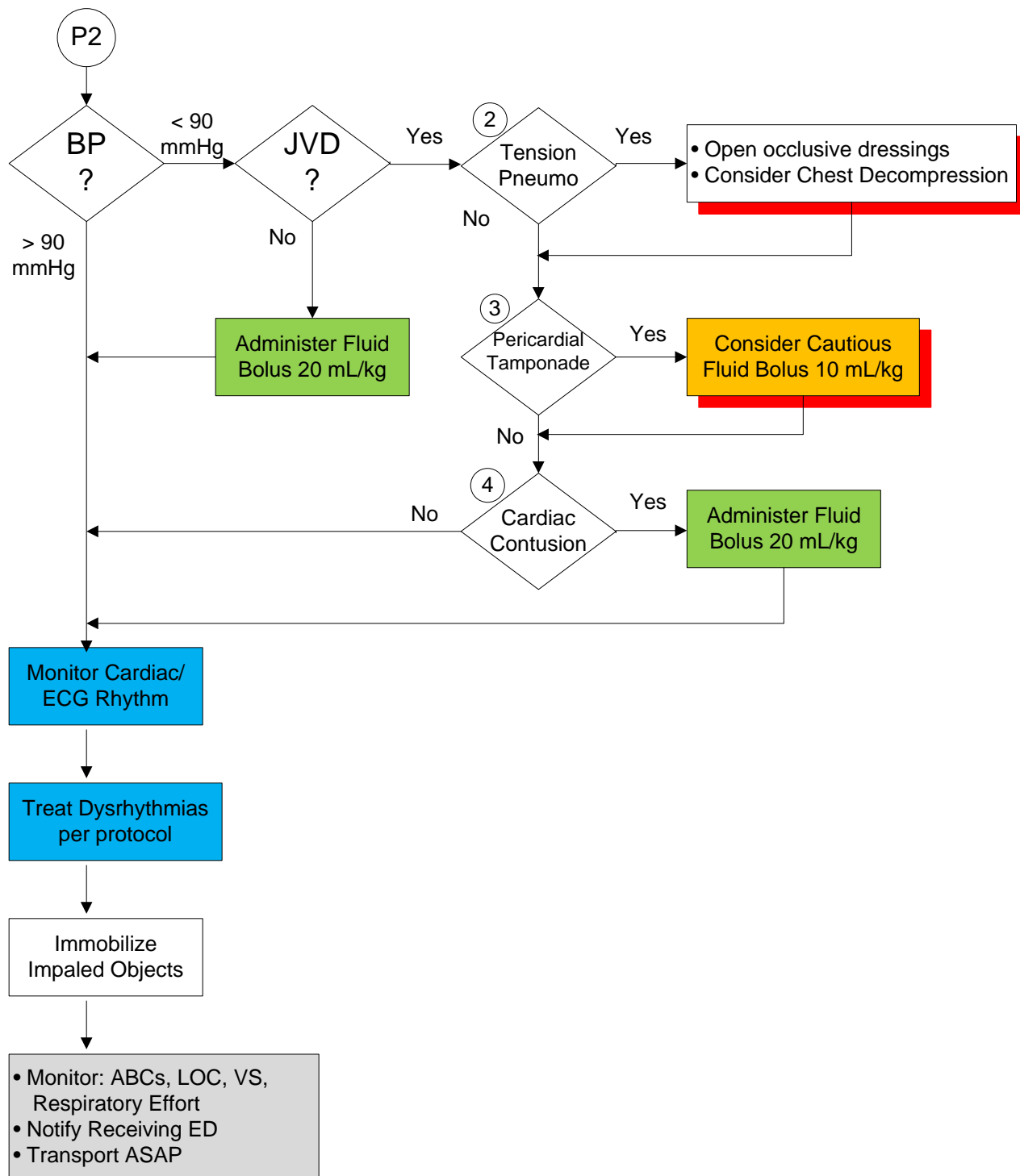
- Mechanism of Injury
- Time of Injury
- Last Meal
- Areas of pain/immobility
- Treatment Prior to Arrival
- Estimated Blood Loss
- Lung/Heart Sounds

- Neurological Assessment
- Rapid Trauma Assessment
- Highest priority injuries first



Note:

1 Scene times in cases of traumatic injury should be 10 minutes or less if possible.



Note:

- 2 S/S of Tension Pneumothorax: diminished breath sounds, diminished compliance, severe dyspnea.
- 3 S/S of Pericardial Tamponade: decreasing BP, narrowing pulse pressure, muffled heart sounds.
- 4 S/S of Cardiac Contusion: chest pain, associated injuries, sinus tachycardia, atria fibrillation and/or flutter, premature atrial contractions

Extremity Injury

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Contact On-line Medical Control

- BSI
- Scene Safety
- Mechanism
- Resources
- C-Spine

- General Impression
- ABC's, LOC
- Oxygen NC 2-4 lpm
- Frequent Vital Signs
- Prepare for immediate transport

- C-Spine precautions prn
- Rapid Trauma Assessment
- Highest priority injuries first

Unstable Patient

Yes

Splint injuries by securing patient to long spine board

Consider Code-3-Return

No

Observe for:

- DCAP-BTLS
- Distal PMS

①

Consider IV Access and pain management

Apply sterile dressings to open wounds

- Splint/Apply traction as appropriate
- Immobilize joints above and below injury

Loss of distal PMS

Yes

If possible reduce fracture to regain distal pulses

No

- Confirm distal PMS
- Elevate simple fractures
- Apply padded ice packs

- Monitor: ABCs, LOC, VS, Distal PMS
- Transport ASAP

Document:

- Mechanism of Injury
- Time of Injury
- Last Meal
- Areas of pain/immobility
- Treatment Prior to Arrival
- Blood Loss

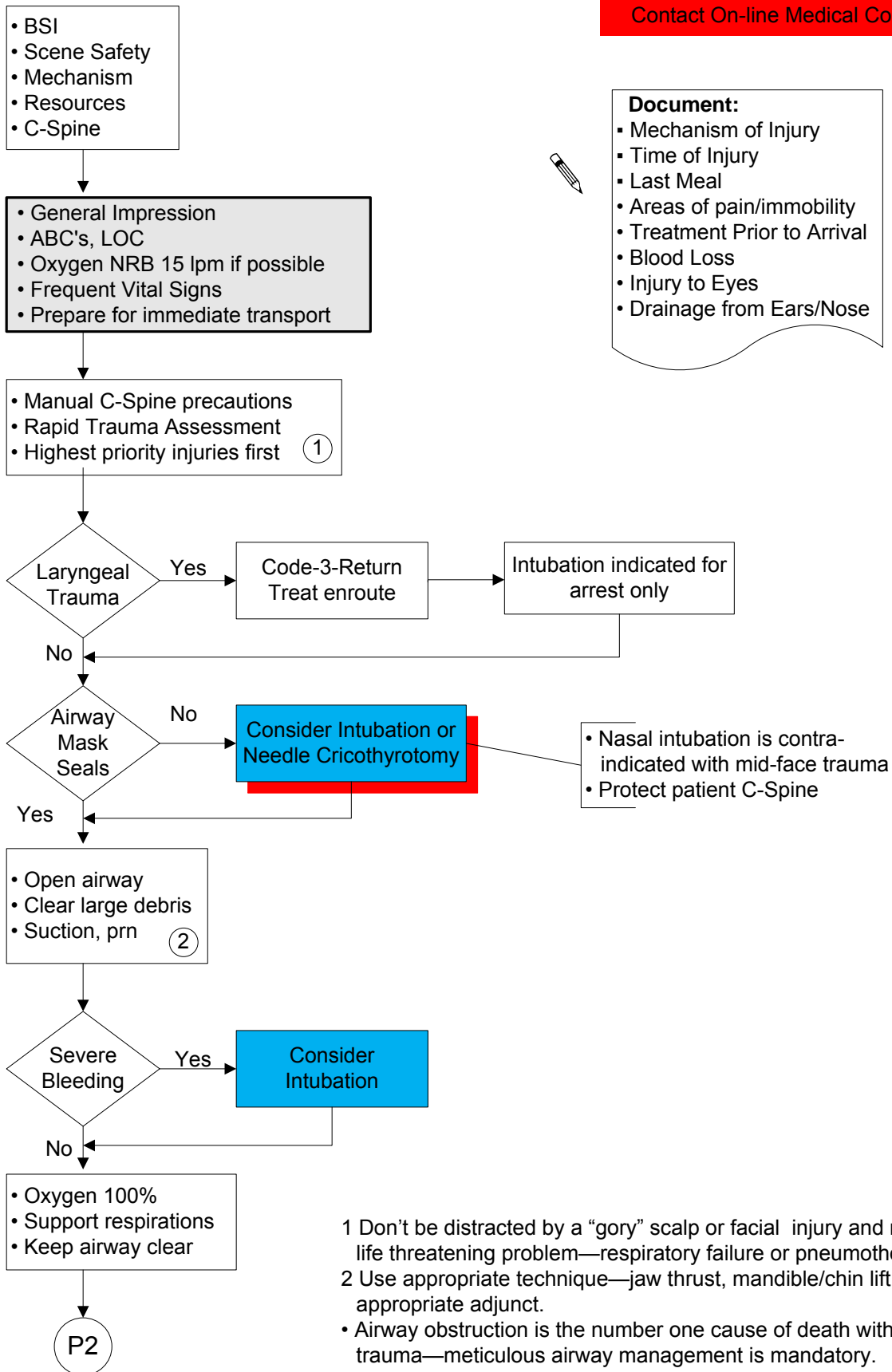
1 Don't be distracted by a "gory" extremity injury and miss a life threatening problem—respiratory failure or pneumothorax.

Face / Neck Injury

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Contact On-line Medical Control



Document:

- Mechanism of Injury
- Time of Injury
- Last Meal
- Areas of pain/immobility
- Treatment Prior to Arrival
- Blood Loss
- Injury to Eyes
- Drainage from Ears/Nose

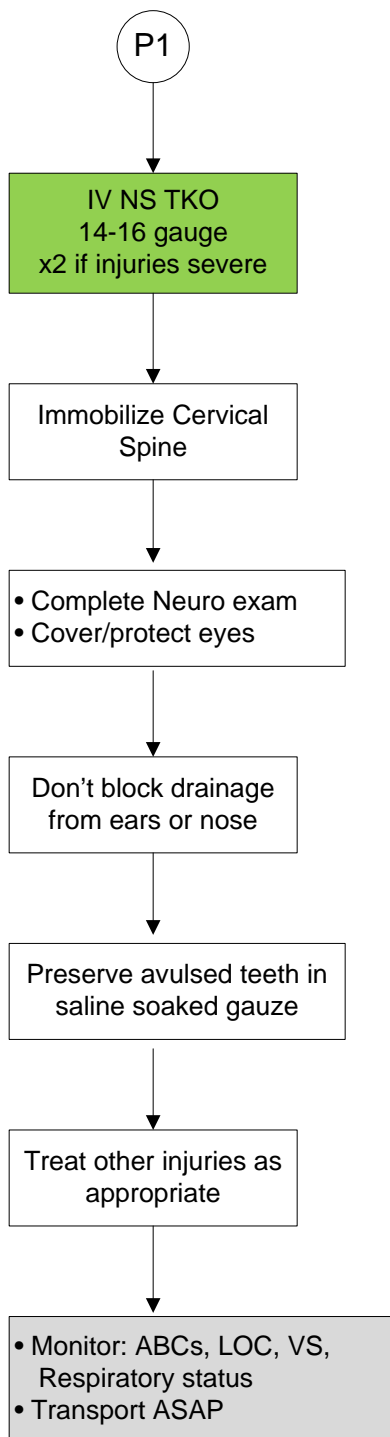
- Nasal intubation is contra-indicated with mid-face trauma
- Protect patient C-Spine

1 Don't be distracted by a "gory" scalp or facial injury and miss a life threatening problem—respiratory failure or pneumothorax.

2 Use appropriate technique—jaw thrust, mandible/chin lift with appropriate adjunct.

- Airway obstruction is the number one cause of death with facial trauma—meticulous airway management is mandatory.

- Don't be distracted by contact lenses in the field—leave them in place.



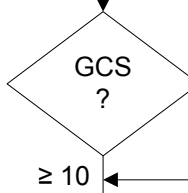
Head Injury

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

- BSI
- Scene Safety
- Mechanism
- Resources
- **Manual C-Spine**

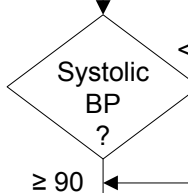
- ABCs
- Oxygen 100%
- Vital Signs
- Glasgow Coma Scale
- Support Respiration, PRN
- Transport ASAP



Consider Intubation

- Support Respirations
- Maintain EtCO2 at 35-45 mmHg

Immobilize/
Package
Patient



Treat Enroute

Treat per
6.35_Shock Trauma

- Support Respirations
- Rapid Trauma Assessment
- Treat other Injuries
- Watch for Status Changes

- Monitor:
- ABCs, VS, GCS, LOC
 - Respiratory Status, EtCO2
 - Transport ASAP



- Document:**
- Signs & Symptoms
 - Glasgow Coma Scale
 - SpO2, ETCO2, VS
 - Cardiac Rhythm
 - Pulse/Motor/Sensation X 4
 - Lung Sounds
 - Respiratory Effort/Pattern
 - Mechanism of Injury
 - Onset & Duration of LOC

Glasgow Coma Scale		
Eye Opening	Spontaneous	4
	To Voice	3
	To Pain	2
	None	1
Verbal Response	Best Oriented	5
	Confused	4
	Inappropriate words	3
	Incomprehensible words	2
Motor Response	None	1
	Best Obeys Commands	6
	Localizes Pain	5
	Withdraws (Pain)	4
	Flexion	3
	Extension	2
	None	1

Shock - Trauma

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

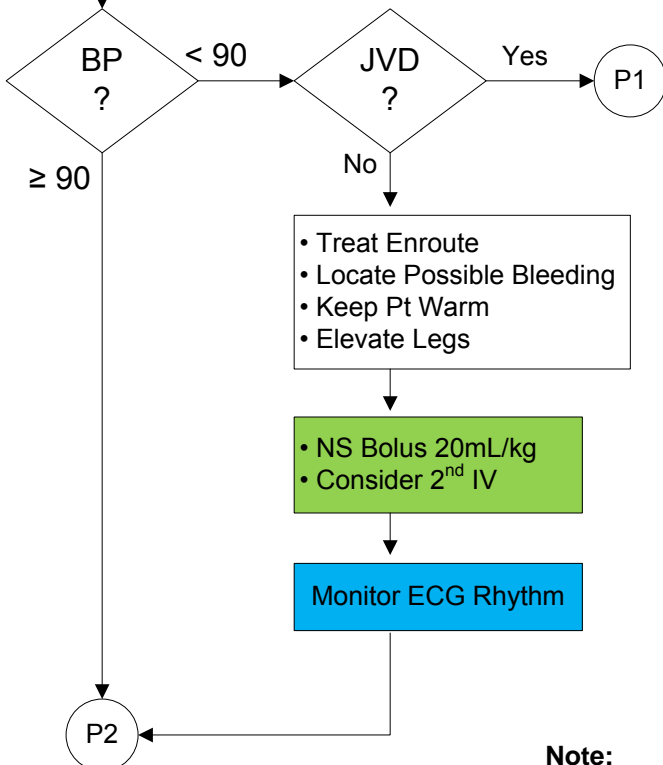
Contact On-line Medical Control

- BSI
- Scene Safety
- Mechanism
- Resources

- General Impression
 - C-Spine Precautions, PRN
 - ABC's, LOC, VS
 - Oxygen NRB 15 lpm
 - Support Respiration, PRN
 - Control exsanguinating hemorrhage
 - Prepare for immediate transport
- 1

- Neurological Assessment
- Rapid Trauma Assessment
- Highest priority injuries first

- IV NS 14-16g
- TKO
- 2nd Line prn

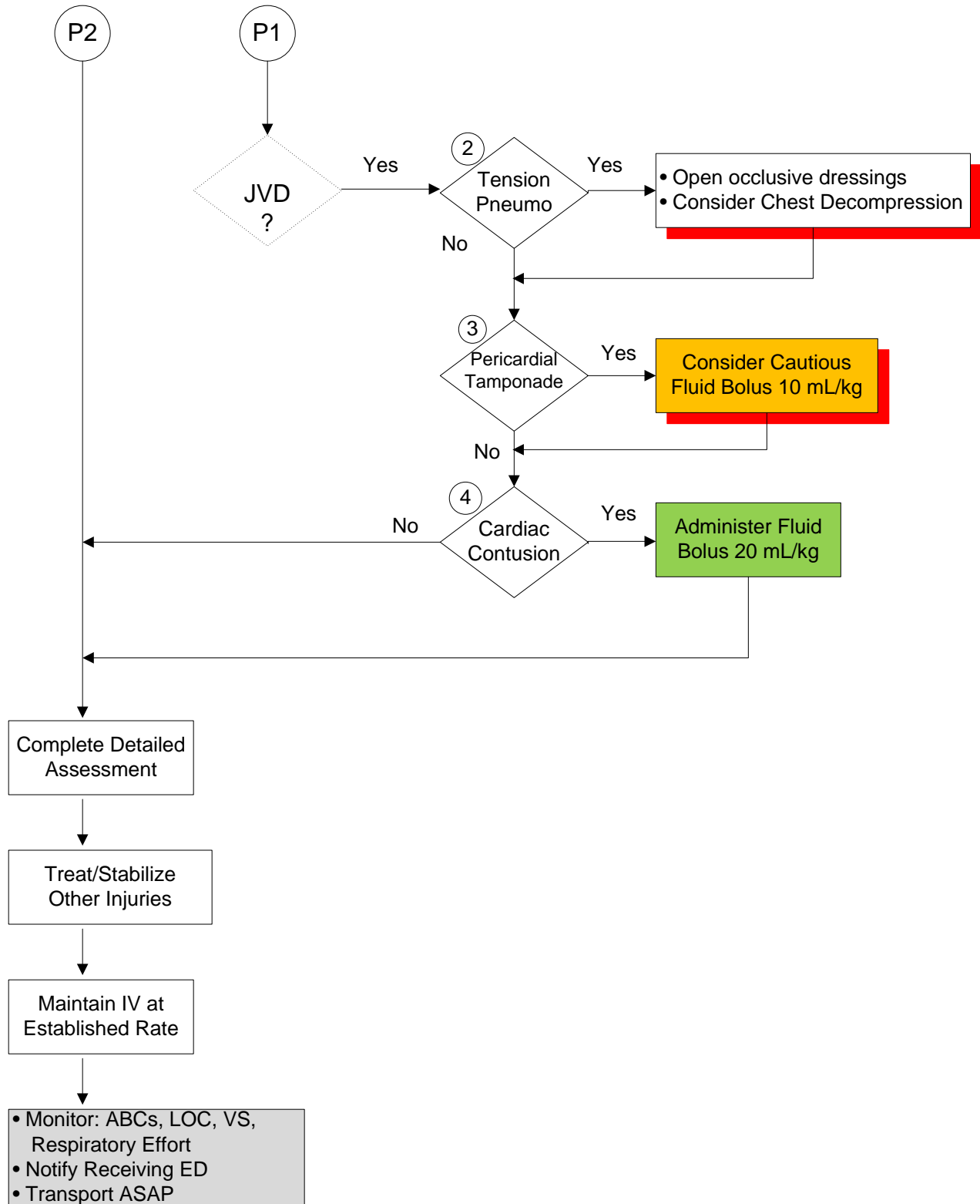


Document:

- Mechanism of Injury
- Time of Injury
- Last Meal
- Areas of pain/immobility
- Treatment Prior to Arrival
- Estimated Blood Loss
- Lung/Heart Sounds

Note:

1 Scene times in cases of traumatic injury should be 10 minutes or less if possible.



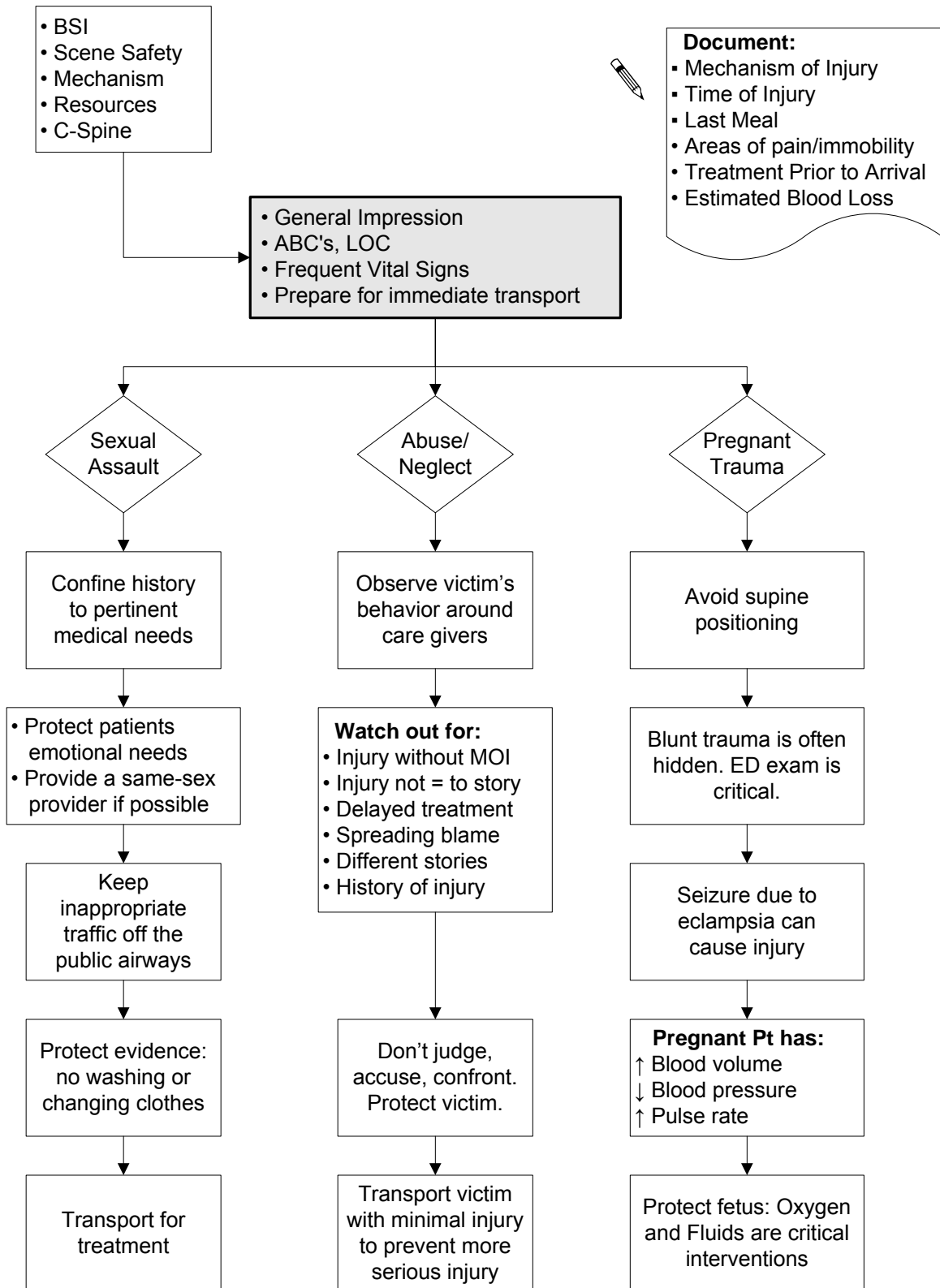
Note:

- 2 S/S of Tension Pneumothorax: diminished breath sounds, diminished compliance, severe dyspnea.
- 3 S/S of Pericardial Tamponade: decreasing BP, narrowing pulse pressure, muffled heart sounds.
- 4 S/S of Cardiac Contusion: chest pain, associated injuries, sinus tachycardia, atria fibrillation and/or flutter, premature atrial contractions

Special Trauma

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



Spinal Injury

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

- BSI
- Scene Safety
- Mechanism
- Resources
- **Manual C-Spine**

- ABCs
- Oxygen 100%
- Vital Signs
- Glasgow Coma Scale
- Support Respiration, PRN
- Transport ASAP

Immobilize/
Package
Patient

- Secure with Cervical Collar
- Move Pt to Long Spine Board
- Inspect Posterior Anatomy
- Secure Trunk First, then Head, Extremities Last

- IV NS 14-16 gauge TKO
- 2nd Line If MOI Significant

Systolic
BP
?

< 90

Treat Enroute

Treat per
6.35_Shock Trauma

≥ 90

- Support Respirations
- Rapid Trauma Assessment
- Treat other Injuries
- Watch for Status Changes

- Monitor:
- ABCs, VS, GCS, LOC
 - Respiratory Status, EtCO2
 - Transport ASAP



Document:

- Signs & Symptoms
- Glasgow Coma Scale
- SpO2, ETCO2, VS
- Cardiac Rhythm
- Pulse/Motor/Sensation X 4
- Lung Sounds
- Respiratory Effort/Pattern
- Mechanism of Injury
- Onset & Duration of LOC

Glasgow Coma Scale		
Eye Opening	Spontaneous	4
	To Voice	3
	To Pain	2
	None	1
Verbal Response	Best Oriented	5
	Confused	4
	Inappropriate words	3
	Incomprehensible words	2
Motor Response	None	1
	Best Obeys Commands	6
	Localizes Pain	5
	Withdraws (Pain)	4
	Flexion	3
	Extension	2
	None	1

Pediatric Overview

Pediatric Patients are not just “Small People”

Airways are smaller,
easier to obstruct
or collapse

Respiratory reserve
is smaller,
minor insults lead to
major problems.

Circulatory reserve is
smaller, a 500mL loss
can lead to death.

VS, LOC can be
hard to assess.
Talk to parents,
get a good history.

The proper size
of equipment can be
critical: BVMs,
Collars, IVs, etc

Pediatric meds and
supplies should be
stored separately.

Practice pediatric
skills often
to remain sharp.

Pediatric Respiratory Distress

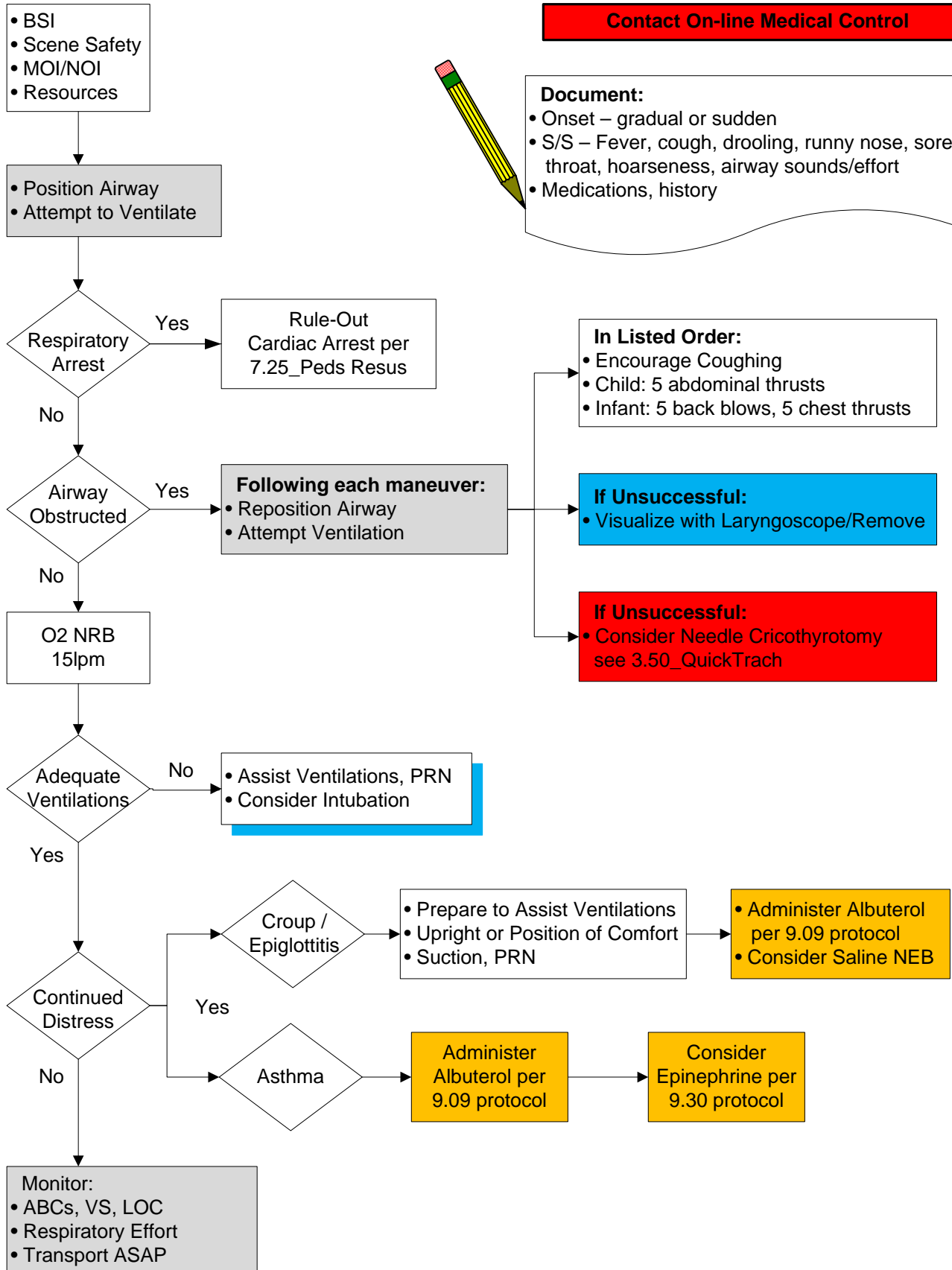
Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Contact On-line Medical Control

Document:

- Onset – gradual or sudden
- S/S – Fever, cough, drooling, runny nose, sore throat, hoarseness, airway sounds/effort
- Medications, history

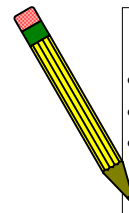


Pediatric Seizures

Scope-of-Practice

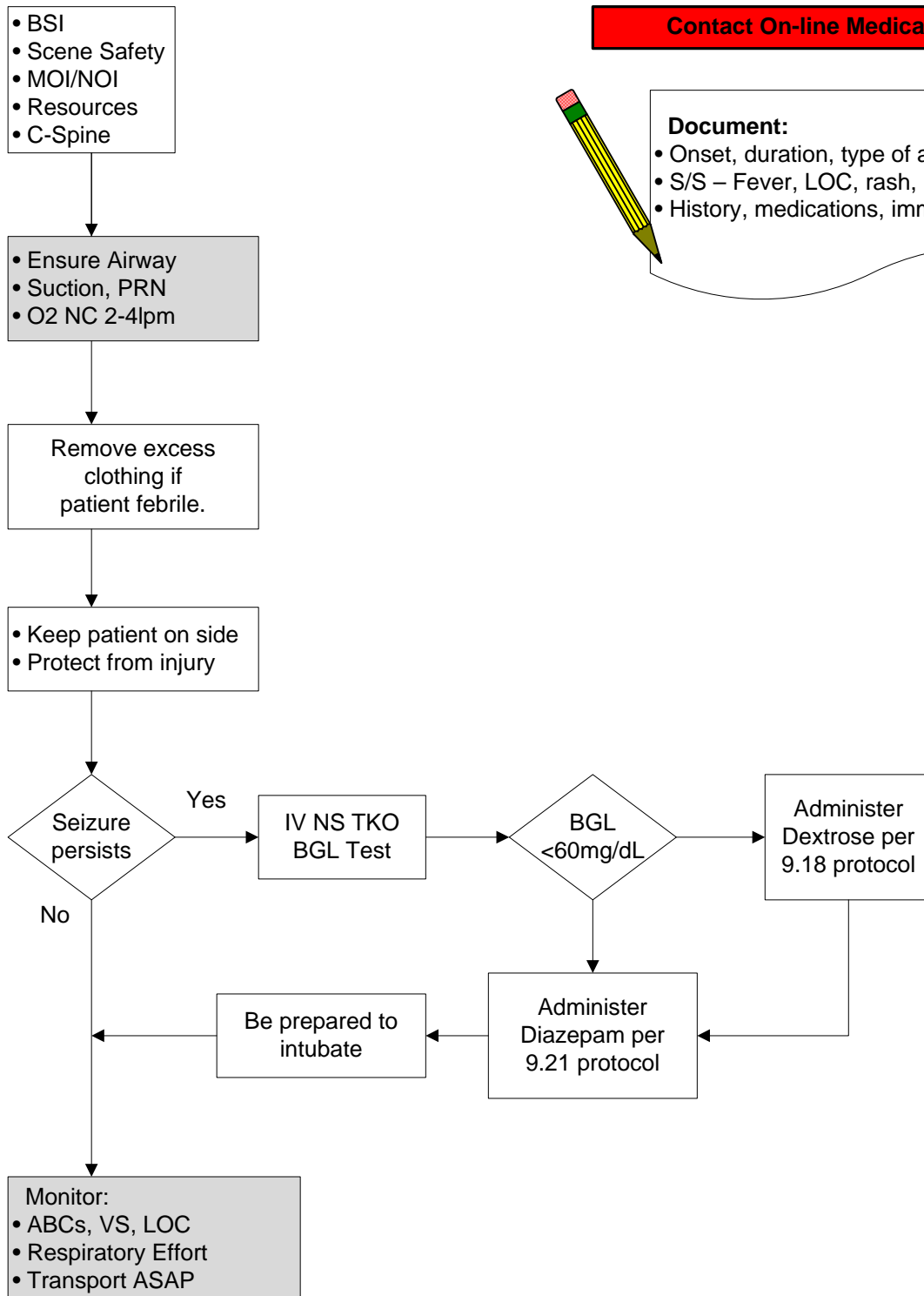
	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Contact On-line Medical Control



Document:

- Onset, duration, type of activity, trauma
- S/S – Fever, LOC, rash, illness
- History, medications, immunizations

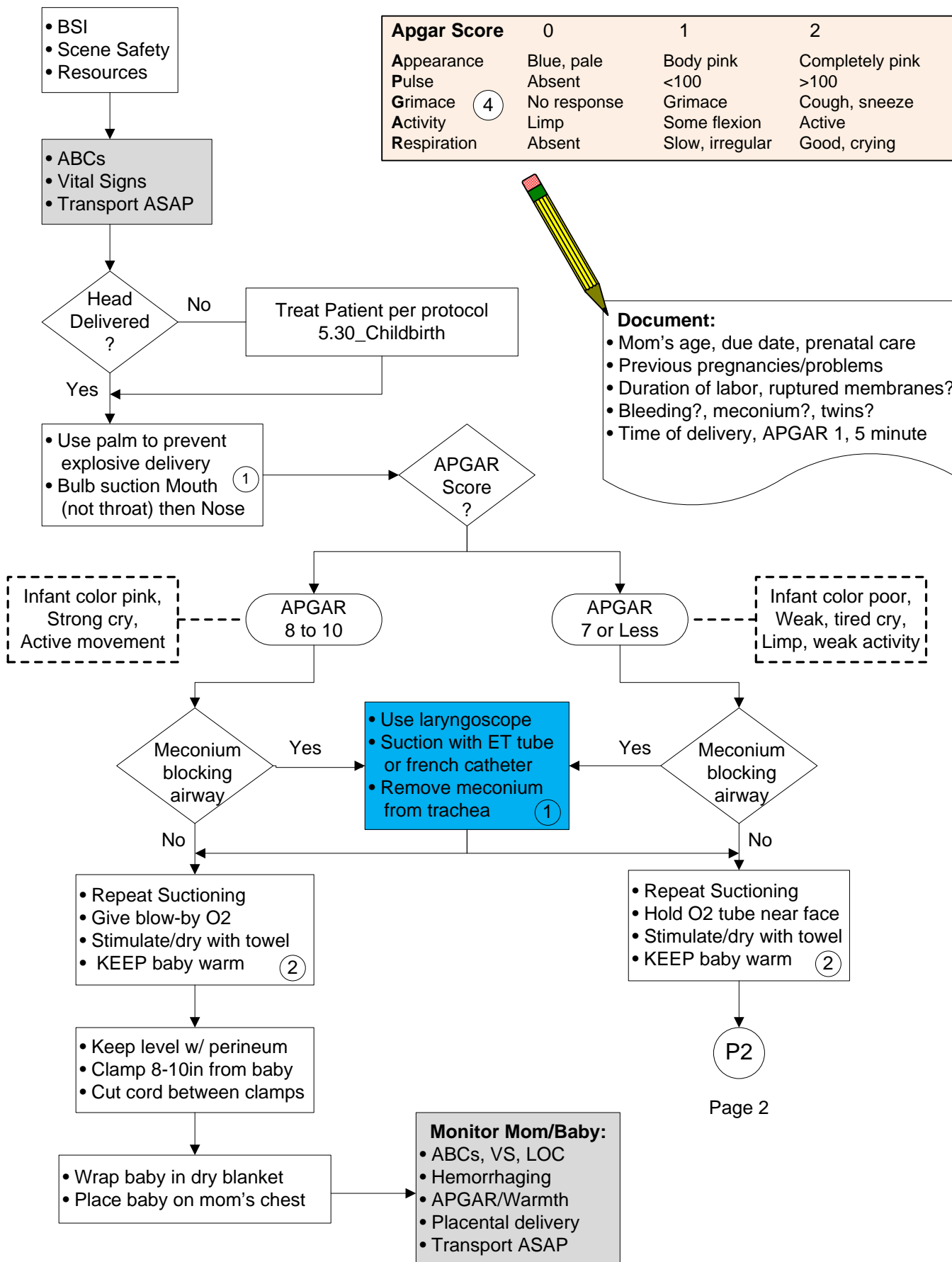


Neonatal Resuscitation

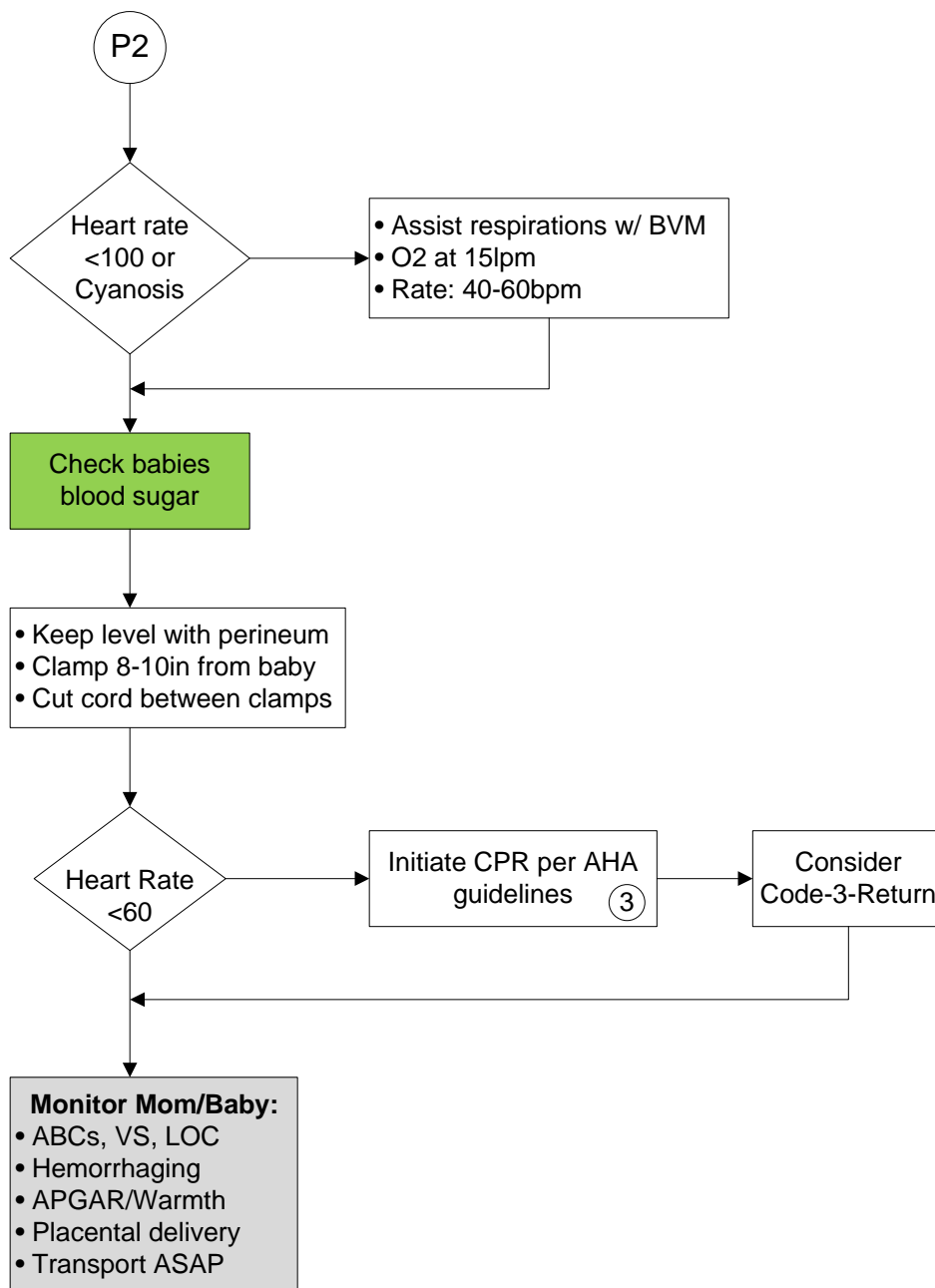
Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

Apgar Score	0	1	2
Appearance	Blue, pale	Body pink	Completely pink
Pulse	Absent	<100	>100
Grimace	No response	Grimace	Cough, sneeze
Activity	Limp	Some flexion	Active
Respiration	Absent	Slow, irregular	Good, crying



Page 1



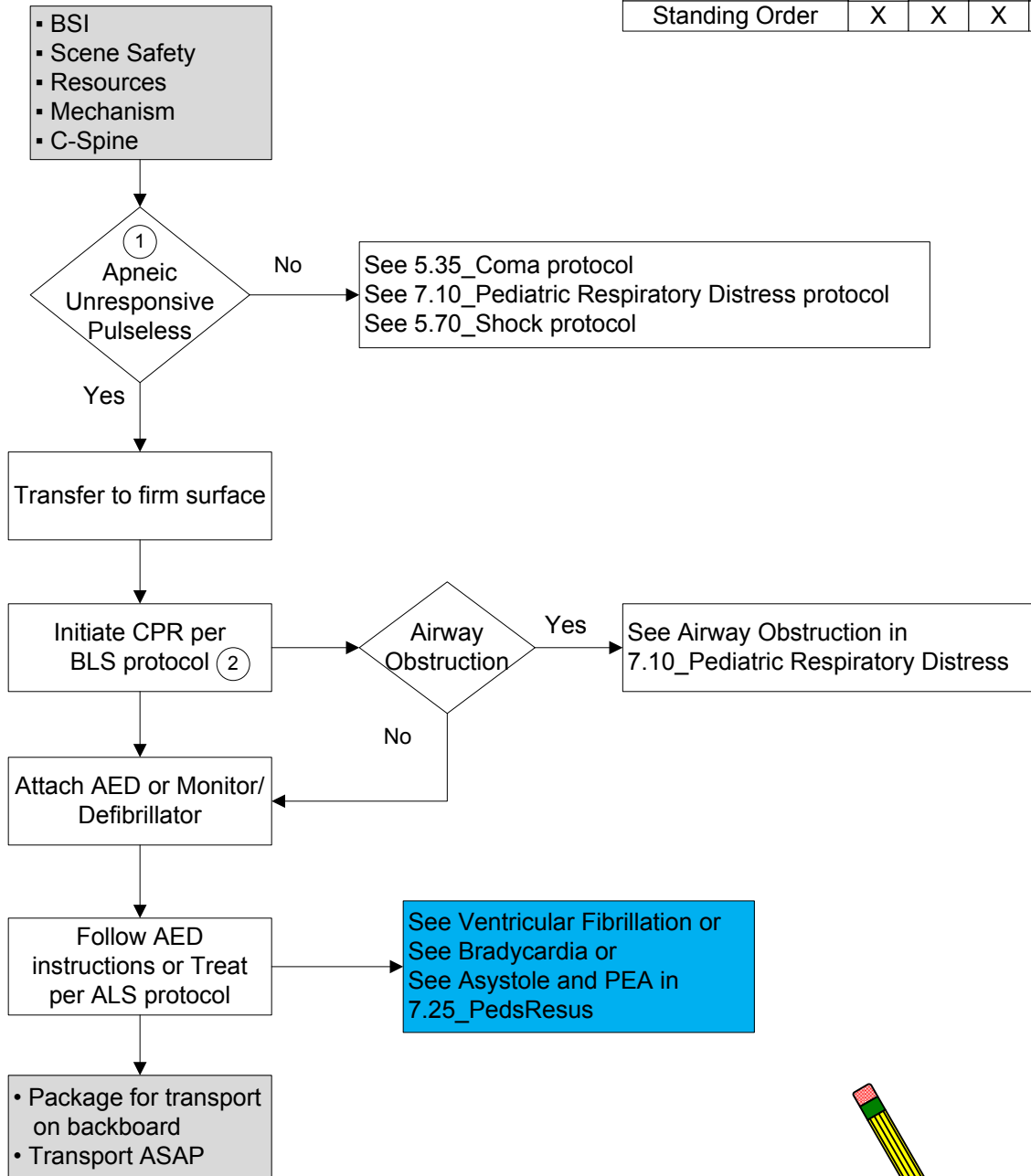
Notes:

- 1 When suctioning don't over stimulate the back of the mouth due to vagal response. Minimize suctioning time and use a lower setting with in-line suctioning.
- 2 Babies have poorly developed temperature control—KEEP them warm.
- 3 This is not the time for field heroics. Airway support, CPR, temperature support and “pedal therapy” may be your best options.
- 4 Grimace to suctioning; Activity to stimulation, drying, holding

Infant/Child Resuscitation

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X



Document:

- MOI/NOI
- Downtime
- Current History: Meds, Illnesses
- signs of abuse, neglect, poisoning

Notes:

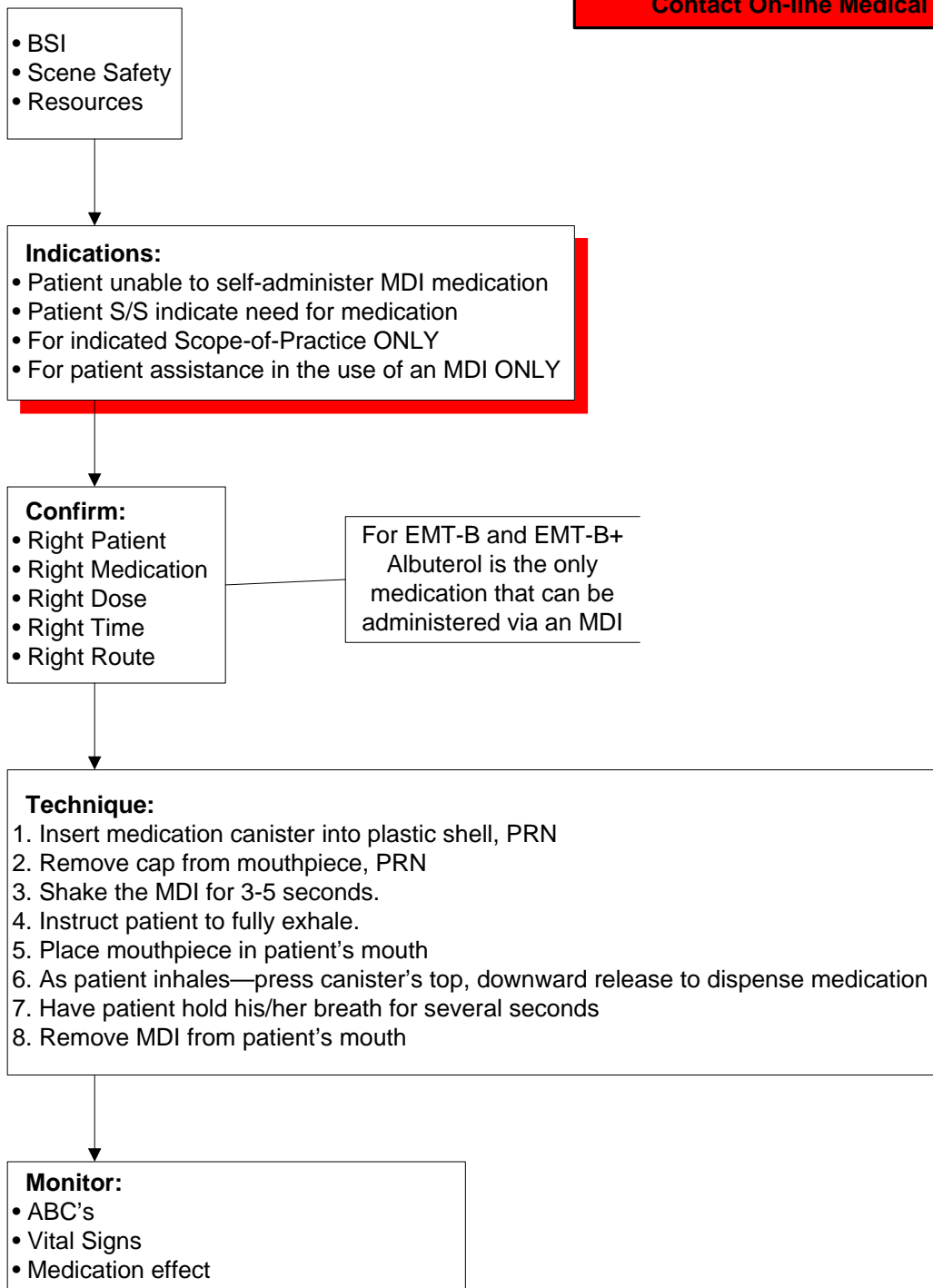
1. Be sure to recheck patient status even if CPR is already in progress upon arrival.
2. Before initiating CPR consider 2.10_Death-in-the-Field protocol

Metered Dose Inhaler – MDI

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed		X	X	X	X
Standing Order					X

Contact On-line Medical Control

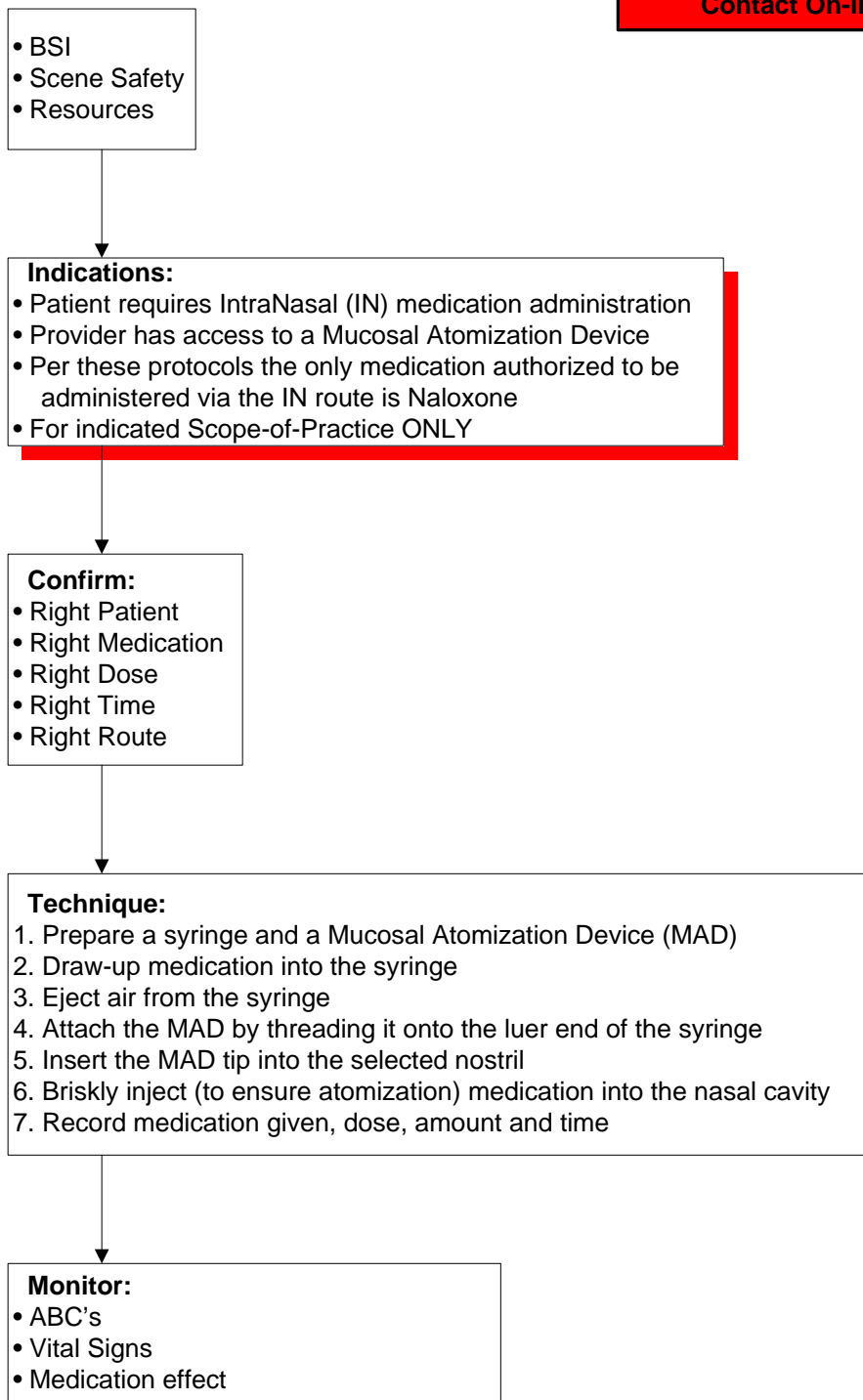


Medication Administration – IN

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed			X	X	X
Standing Order				X	X

Contact On-line Medical Control

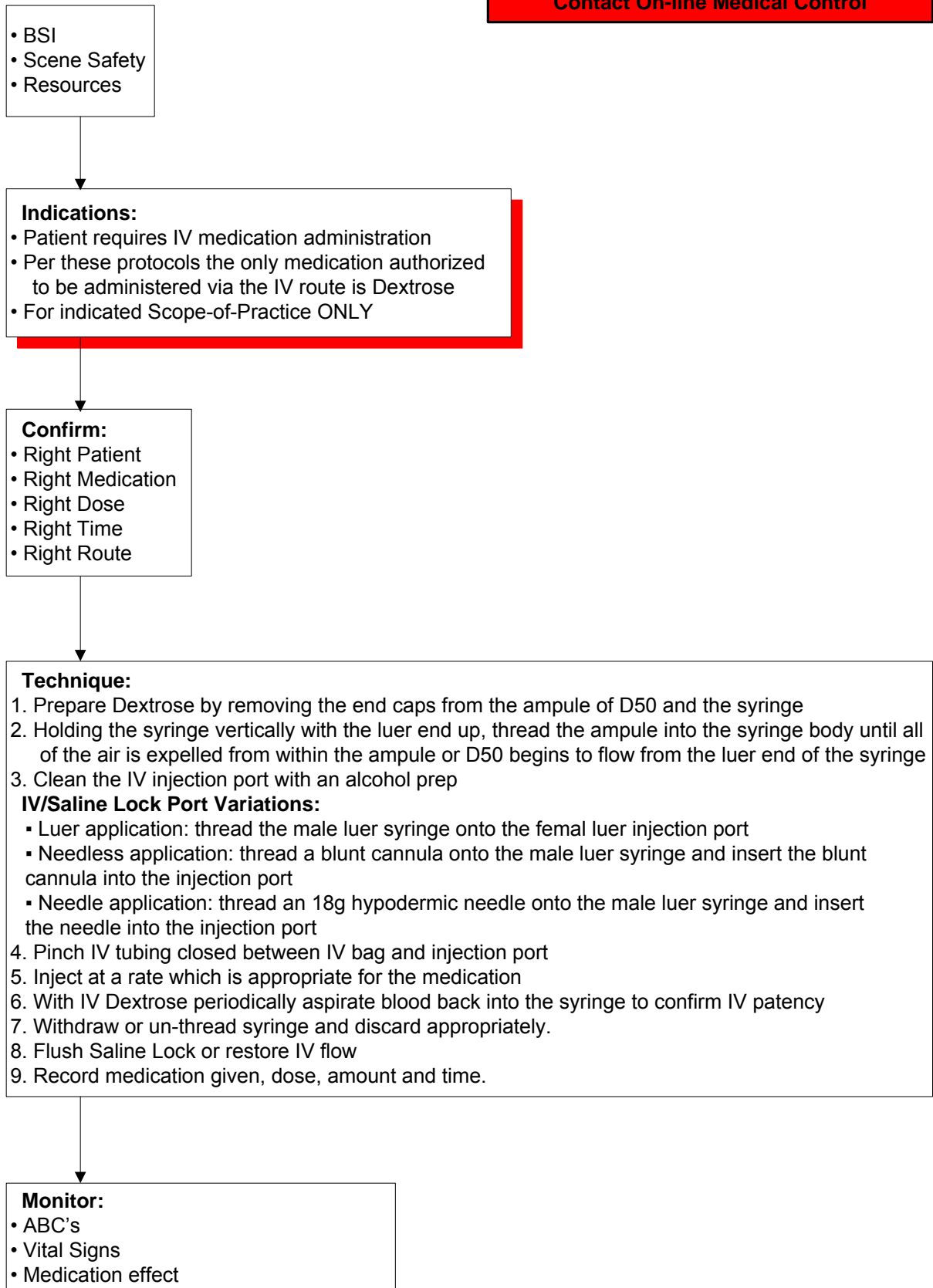


Medication Administration – IV

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed			X	X	X
Standing Order				X	X

Contact On-line Medical Control

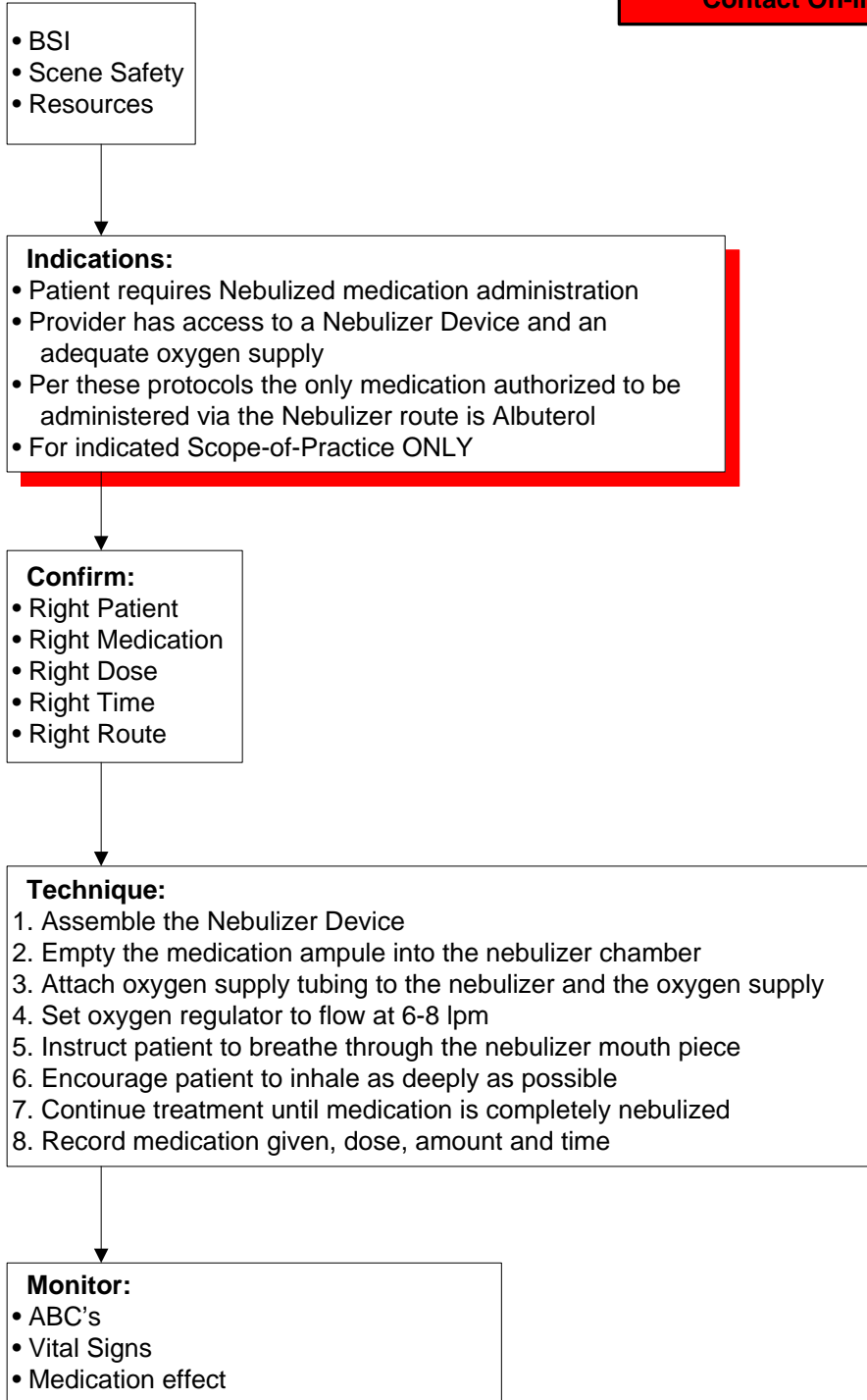


Medication Administration Nebulizer

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed		X	X	X	X
Standing Order				X	X

Contact On-line Medical Control



Spinal Immobilization

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

- BSI
- Scene Safety
- Resources

Indications:

- Pain, swelling or deformity of the spine that may be due to fracture, dislocation or ligament instability
- Neurological deficit possibly due to spinal injury
- Prevention of neurological deficit in patients with suspected spinal injury
- All trauma patients who are unconscious or have altered mentation where spinal injury can't be ruled out
- Patients with significant MOI: MVC, fall, GSW, stabbing or assault; even if the patient denies injury
- Failure of any of the NEXUS criteria

Precautions:

- All patients with significant head trauma should be immobilized due to the potential for hidden or unrecognized neck trauma
- Document a complete neuro exam before and after spinal immobilization

Technique:

1. Splint cervical spine with C-collar after primary survey
2. Complete secondary survey and splint fractures before moving patient if possible
3. Document neurological and pulse, motor, sensation (PMS) findings
4. Sitting patient, KED device:
 - a. Slide KED behind patient
 - b. Apply torso straps snugly
 - c. Apply thigh straps snugly as close to groin as possible
 - d. Use padding as needed to ensure neck stays in neutral position
 - e. Secure head to KED using straps, tape or cloths
5. Supine/prone patient, Long Spine Board:
 - a. With continuous cervical stabilization, logroll or lift patient as unit, examine posterior of patient, place board under patient, place patient in supine position on board
 - b. Pad voids under knees, lower back, neck (torso for pediatric patients)
 - c. Secure patient's torso to board
 - d. Using commercial blocks or rolled towels and tape, secure head to board
 - e. Secure patient's extremities to board
6. Document neurological, PMS findings
7. Assign assistant to monitor airway and cervical spine immobilization.

Monitor:

- ABC's
- Vital Signs
- Mental Status, Level of Consciousness

NEXUS Criteria:

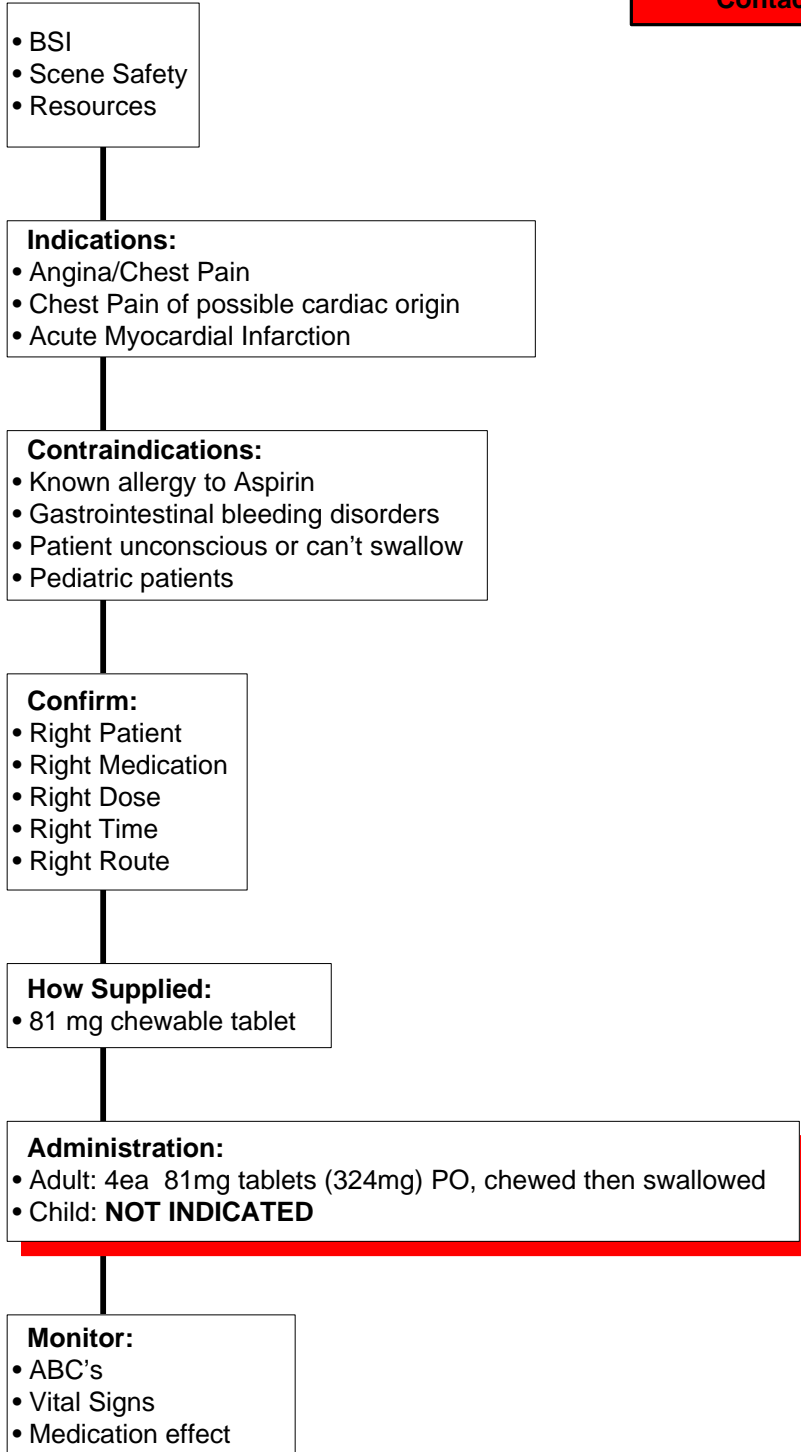
- No posterior, midline cervical tenderness
- No evidence of intoxication
- Normal level of consciousness
- No focal neurological deficits
- No painful, distracting injuries
- Not < 5 y/o or > 65 y/o

Aspirin

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed		X	X	X	X
Standing Order				X	X

Contact On-line Medical Control



Albuterol

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed		X	X	X	X
Standing Order					X

Contact On-line Medical Control

- BSI
- Scene Safety
- Resources

- Indications:**
- Wheezing due to bronchospasm
 - Bronchospasm due to Asthma, COPD, Bronchitis, Anaphylaxis

- Contraindications:**
- Symptomatic tachycardia

- Precautions:**
- Use caution in patients with Hx of HTN, CAD, CHF, hypothyroidism
 - May lower seizure threshold in susceptible patients
 - Place patient > 40 y/o on cardiac monitor
 - Side effects include: tachycardia, tremors, nervousness and nausea

- Confirm:**
- Right Patient
 - Right Medication
 - Right Dose
 - Right Time
 - Right Route

- Administration:**
- Metered Dose Inhaler:**
See 8.50.1_MDI for administration technique
- Nebulizer:**
See 8.50.4_MedAdminNEB for administration technique
- Adult: One unit dose vial of premixed solution
May be repeated as necessary
 - Child (< 2 y/o): Use one-half adult dosage

- Monitor:**
- ABC's
 - Vital Signs
 - Watch for side effects: hypotension, headache

Activated Charcoal

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed		X	X	X	X
Standing Order				X	X

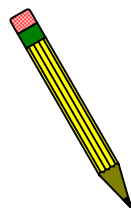
Contact On-line Medical Control

- BSI
- Scene Safety
- Resources

- Indications:**
- Toxic ingestion of chemicals other than acids, alkalis or hydrocarbons
 - Overdose of medications other than iron or lithium

- Contraindications:**
- Don't administer to a patient who has taken ipecac. Charcoal is very difficult to clean.
 - Don't administer to a comatose patient. Patient must be able to swallow.

- Confirm:**
- Right Patient
 - Right Medication
 - Right Dose
 - Right Time
 - Right Route



- Document:**
- What was ingested
 - How much was ingested
 - When was it ingested
- Poison Control:**
- 800.222.1222

- Administration:**
- Adult
1 Gm/kg PO
 - Pediatric
1 Gm/kg PO

- Monitor:**
- ABC's
 - Vital Signs
 - Medication effect

Dextrose

D50 / D25 / D10

	FR	B	B+	I	P
Act Allowed			X	X	X
Standing Order				X	X

Contact On-line Medical Control

- BSI
- Scene Safety
- Resources

- Indications:**
- Blood Glucose Level (BGL) < 60 mg/dl
 - Illness or Altered Mental Status (AMS) in known diabetic patient
 - Unconscious patient with unknown etiology and hypoglycemia can't be ruled out
 - Seizure or Cardiac Arrest in patient with diabetic history
 - Children < 3 years old with signs of shock
 - Hypothermic patients

- Precautions:**
- If possible, always obtain a BGL before giving dextrose
 - Ensure a patent vein before giving IV dextrose
 - Older CVA patients may be made worse with IV dextrose – contact On-line Medical Control

- Confirm:**
- Right Patient
 - Right Medication
 - Right Dose
 - Right Time
 - Right Route

- How Supplied:**
- D50: 25 gm/50mL
 - D25: (D50, waste 25mL, fill to 50mL with NS)
 - D10: (D50, waste 40mL, fill to 50mL with NS)

- Administration:**
- Adult: 25 gm – D50 via patent IV
 - Child: 2mL/kg – D25 via patent IV
 - Neonate: 5mL/kg – D10 via patent IV

- Monitor:**
- ABC's
 - Vital Signs
 - Medication effect

Oral Glucose

Oral Glucose

	FR	B	B+	I	P
Act Allowed		X	X	X	X
Standing Order				X	X

Contact On-line Medical Control

- BSI
- Scene Safety
- Resources

- Indications:**
- Blood Glucose Level (BGL) < 60 mg/dl
 - Illness or Altered Mental Status (AMS) in known diabetic patient
 - Conscious patient with the ability to swallow
 - Hypothermic patients

- Precautions:**
- If possible, always obtain a BGL before giving oral glucose
 - Ensure patient can swallow oral glucose

- Confirm:**
- Right Patient
 - Right Medication
 - Right Dose
 - Right Time
 - Right Route

- How Supplied:**
- Oral Glucose: 15 gm/tube

- Administration:**
- Oral Glucose: entire tube PO, may also consider: juice, honey, molasses, syrup or D50

- Monitor:**
- ABC's
 - Vital Signs
 - Medication effect

Epinephrine – EpiPen

EpiPen

	FR	B	B+	I	P
Act Allowed		X	X	X	X
Standing Order					X

Contact On-line Medical Control

- BSI
- Scene Safety
- Resources

- Indications:**
- Severe systemic allergic reactions or anaphylaxis
 - Patient unable to self-administer EpiPen
 - For indicated Scope-of-Practice ONLY

- Precautions:**
- Increased cardiac effort can cause susceptible (elderly) patients to experience chest pain, angina or acute myocardial infarction

- Confirm:**
- Right Patient
 - Right Medication
 - Right Dose
 - Right Time
 - Right Route

- How Supplied:**
- Adult: 0.3mg auto-injector
 - Child: 0.15mg auto-injector

- Administration:**
- Unscrew the yellow or green cap off of the EpiPen carrying case and remove the EpiPen auto-injector from its storage tube.
 - Grasp the EpiPen with the black tip pointing down in your dominant hand.
 - Form a fist around the EpiPen.
 - With your other hand, pull off the grey safety release.
 - Jab EpiPen at a 90 degree angle, firmly into outer thigh until it clicks. EpiPen is designed to penetrate clothing.
 - Hold unit firmly against thigh for 10 seconds.
 - Remove unit and massage injection site for 10 seconds.
 - Carefully place the EpiPen back into its storage tube
 - Patient MUST be transported for follow-up care ASAP.

- Monitor:**
- ABC's
 - Vital Signs
 - Watch for side effects: anxiety, tremor, palpitations, headache

Naloxone – Narcan

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed			X	X	X
Standing Order				X	X

Contact On-line Medical Control

- BSI
- Scene Safety
- Resources

- Indications:**
- Reversal of narcotic effects

- Precautions:**
- Sudden withdrawal may cause violent reactions – be prepared to restrain, or have enough people, to secure patient; consider incremental doses.

- Confirm:**
- Right Patient
 - Right Medication
 - Right Dose
 - Right Time
 - Right Route

- Administration:**
- Adult: up to 2 mg Slow IV or IN, May be repeated after 5 minutes, prn
 - Child: 0.04 mg/kg Slow IV or IN, May be repeated after 5 minutes, prn

- Monitor:**
- ABC's
 - Vital Signs, Respiratory status
 - Medication effect – reversal of narcotic effects

- Common Narcotics:**
- Codeine
 - Darvon (propoxyphene)
 - Demerol (meperidine)
 - Dilaudid (hydromorphone)
 - Fentanyl (sublimaze)
 - Heroin
 - Methadone
 - Morphine
 - Oxycontin (oxycodone)
 - Talwin (pentazocine)

Nerve Agent Antidote Mark I Antidote Kit

Mark I Antidote Kit

	FR	B	B+	I	P
Act Allowed		X	X	X	X
Standing Order		X	X	X	X

- BSI
- Protective Mask for Patient and Provider
- Scene Safety
- Resources

Indications:

Mild Exposure:

- Difficulty seeing (miosis)
- Difficulty breathing
- Headache, Runny Nose, Drooling
- Localized muscle twitching (exposure site)

Severe Exposure:

- Nausea and vomiting
- Severe muscle twitching
- Altered mental status
- Loss of bowel and bladder control
- Respiratory distress leading to respiratory failure
- Convulsions leading to Coma and Death

How Supplied:

Each Mark I Antidote Kit contains:

- 1 auto-injector with Atropine 2mg (smaller tube)
- 1 auto-injector with Pralidoxime Chloride (2-PAM) 600mg

Administration:

- Confirm Right medication and expiration dates.
- Remove Mark I kit from its case
- Grasp the kit in non-dominant hand with larger tube on top (2-PAM)
- Remove the bottom, smaller (Atropine) tube from its cap/holder. The injector is now activated.
- Holding firmly, place the injector end (end removed from cap) against the injection site. Mid-lateral thigh (preferred) or upper lateral quadrant of buttock (thin patients)
- Press injector into site with firm pressure until spring releases ejecting needle. Hold for 10 seconds
- Repeat procedure for top, larger (2-PAM) injector
- For Mild s/s 1 or 2 Mark I's should be used spaced 10 minutes apart
- For Severe s/s use a maximum of 3 Mark I's in succession.

Patient
Convulsing

Yes

Administration:

- ALS Provider only
- Diazepam 10mg IV/IM
- May be repeated to control convulsions

Monitor:

- ABC's
- Vital Signs
- Watch for tachycardia, dry mouth – the antidote is working

Nitroglycerin

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed		X	X	X	X
Standing Order				X	X

Contact On-line Medical Control

- BSI
- Scene Safety
- Resources

- Indications:**
- Chest pain believed to be of cardiac origin
 - Patient unable to self-administer Nitroglycerin
 - For indicated Scope-of-Practice ONLY
 - For EMT-B/B+ for patient assistance in the use of prescribed Nitroglycerin ONLY

- Contraindications:**
- Systolic blood pressure < 90 mmHg
 - Patient using erectile dysfunction medications (eg, Viagra, Cialis, Levitra) within last 24 hours

- Precautions:**
- Generalized vasodilatation may cause profound hypotension and reflex tachycardia

- Confirm:**
- Right Patient
 - Right Medication
 - Right Dose
 - Right Time
 - Right Route

- Administration:**
- Adult: Tablet – 1 tablet, 0.4mg, sublingual
 Spray – 1 spray, 0.4mg, sublingual
 May be repeated every 5 minutes for pain if BP > 90 mmHg, MAXIMUM 3 doses
 - Child: NOT Indicated

- Monitor:**
- ABC's
 - Vital Signs
 - Watch for side effects: hypotension, headache

Oxygen

Scope-of-Practice

	FR	B	B+	I	P
Act Allowed	X	X	X	X	X
Standing Order	X	X	X	X	X

- BSI
- Scene Safety
- Resources

Indications:

- Respiratory distress, Shortness-of-breath (SOB)
- Chest Pain, Seizure, Stroke (CVA), Altered Mental Status
- Trauma, CO poisoning, Gas/fume/ exposure, Smoke inhalation
- High Altitude Sickness

Administration:

- Low flow: Nasal Cannula, 2 lpm: COPD, Seizure, SOB, Minor distress
- Moderate flow: Nasal Cannula, 2-6 lpm: Trauma, SOB, Moderate distress
- High flow: Non-Rebreather, 12-15 lpm: Chest pain, CVA, CO poisoning, Shock, High Altitude Sickness, Severe distress

Monitor:

- ABC's
- Vital Signs, Respiratory status
- Medication effect

Abbreviations

↑ = increased or upper
↓ = decreased or lower
≈ = approximately
≤ = less than or equal to
≥ = greater than or equal to
Δ = change
@ = at
ø = no, none
μ = micro
μg = microgram
1 = primary exam
2 = secondary exam
ā = before
AA0x3 = Awake, Alert, Oriented person, place, time
ABC = airway, breathing, circulation
Abd = abdomen
AC = antecubital fossa
AICD = automated internal cardiac defibrillator
AKA = above knee amputation
ALS = Advanced Life Support
Amb = ambulatory
Ant = anterior
AOB = alcohol on breath
A/P = anterior/posterior
APAP = acetaminophen
ASA = aspirin
AV = atrioventricular or arteriovenous
AVPU = alert, verbal, pain, unresponsive?
BDZ = Benzodiazepine
BKA = below knee amputation
BG = blood glucose
BGL = blood glucose level
Bilat = bilaterally
BLS = Basic Life Support
B/P = blood pressure
bpm = beats per minute
BSA = Body Surface Area (burns)
BVM = bag-valve-mask
c = with
C = Centigrade
cc = cubic centimeter
C2 = code 2 (non-emergent)
C3 = code 3 (emergent)
CA = cancer
CABG = coronary artery bypass graft
CaCl = calcium chloride
CAD = coronary artery disease
CAO = conscious, alert and oriented
CC = chief complaint
CCT = critical care transport
CHB = complete heart block
CHF = congestive heart failure
CHI = closed head injury
Clr = clear
cm = centimeter
CMS = circulation, movement, sensation
CNS = central nervous system
c/o = complains of
CO = carbon monoxide
CO2 = carbon dioxide
COPD = chronic obstructive pulmonary disease
C/P = chest pain
CPR = cardiopulmonary resuscitation
CSF = cerebrospinal fluid
CSM = carotid sinus massage
CSP = Colorado State Patrol
C-spine = cervical spine
CT = computerized tomography (CAT scan)
CTLS = cervical, thoracic, lumbar, sacral spine

CVA = cerebrovascular accident (stroke)
Cx = chest
D50 = dextrose 50%
D5W = dextrose 5% in water
Defib = defibrillation
Dig = Digoxin, Lanoxin
DKA = diabetic ketoacidosis
DOA = dead on arrival
DOTS = Deformity, Open wound, Tenderness, Swelling
Dx = diagnosis
ED = Emergency Department
EDC = Estimated Date of Confinement
ER = Emergency Room
ECG = electrocardiogram
EKG = electrocardiogram
EMS = Emergency Medical Services
ETA = estimated time of arrival
EtCO2 = End-tidal CO2
ETI = Endotracheal Intubation
ETT = endotracheal tube
ETOH = beverage alcohol
Exp = expansion
F = Fahrenheit
FA = forearm
FBAO = Foreign Body Airway Obstruction
Fx = fracture
g = gauge (diameter)
GCS = Glasgow Coma Scale or Score
GERD = gastro-esophageal reflux disease
GI = gastrointestinal
Gm = gram
GSW = gunshot wound
gtts = drops
GU = genitourinary
H = hour
HA = headache
HB = heart block (1, 2, 3 HB)
HEENT = head, ears, eyes, nose, throat
HI = head injury
Hosp = Hospital
H/P = history and physical
HR = heart rate
HTN = hypertension
Hx = history
ICP = intracranial pressure
ICS = intercostal space
ICU = Intensive care unit
IFT = Inter Facility Transfer
IM = intramuscular
IN = intranasal
IO = intraosseous
IV = intravenous
IVP = intravenous push
J = Joule
JVD = jugular venous distention
KCl = potassium chloride
KED = Kendrick extrication device
Kg = kilogram
L = left
l = liter
lb = pound
LAC = Las Animas County
LACSO = Las Animas County Sheriff's Office
LAD = left axis deviation or left anterior descending
LAH = left anterior hemiblock
LBB = left bundle branch block
LGL = Lown-Ganong-Levine Syndrome
LLQ = left lower quadrant
lpm = liters per minute
LMP = last menstrual period
LS = lung sounds
LSB = long spine board
LOC = loss of consciousness
LPH = left posterior hemiblock
LUQ = left upper quadrant

Abbreviations

mA = milliamps
MAST = medical anti-shock trouser
MCA = motorcycle accident
MCL = mid-clavicular line
mcg = microgram
meds = medications
mEq = milli-equivalent
mg = milligram
mg/dL = milligrams per deciliter
MgSO₄ = Magnesium Sulfate
MI = myocardial infarction
min = minute
ml = milliliter
mmHG = millimeters of mercury
MOE = Movement of Extremities
MOI = mechanism of injury
MRI = magnetic resonance imaging
MS = Morphine Sulfate
MSO₄ = Morphine Sulfate
MSRH = Mount San Rafael Hospital
MVA = motor vehicle accident
NaHCO₃ = Sodium Bicarbonate
NAD = no acute distress
NARD = no apparent respiratory distress
NATO = not able to obtain
NC = nasal cannula
NP = nasopharyngeal
NEB = nebulizer
NETT = nasal endotracheal tube
NG tube = nasogastric tube
NKDA = no known drug allergies
NL = non labored
NOI = Nature of Illness
NPA = nasal pharyngeal airway
NPO = nothing by mouth
NRB = non re-breather mask
NS = normal saline
NSR = normal sinus rhythm
NTG = nitroglycerin
N/V = nausea/vomiting
N/V/D = nausea/vomiting/diarrhea
O₂ = oxygen
OB = obstetrical
Occ = occipital
OD = overdose
OETT = oral endotracheal tube
OLMC = On-Line Medical Control
OM = otitis media
OP = oropharyngeal
OPA = oral pharyngeal airway
oz = ounce
p = after (with macron)
PA = physician advisor
PAC = premature atrial contraction
Palp = palpation
PALS = Pediatric Advanced Life Support
PASG = pneumatic anti-shock garment
PE = pulmonary embolus
PEA = pulseless electrical activity
PG = pregnant
P#/G# = para # / gravida # (P1G1)
PJC = premature junctional contraction
PMC = Parkview Medical Center
PMS = pulse, movement, sensation
pn = pain
PN = Pneumonia
PO = by mouth
POP = pain on palpation
Post = posterior
PPD = Pueblo Police Department
PR = per rectum; rectally

PRI = P-R interval relating to ECG
PRFD = Pueblo Rural Fire Department
PRN = as needed
PSI = pounds per square inch
PSVT = paroxysmal supraventricular tachycardia
Pt = patient
PTA = Prior to arrival
PTSD = post traumatic stress disorder
PVC = premature ventricular contraction
PWFD = Pueblo West Fire Department
Pn = pain
q = every
QRT = Quick Response Team (member)
R = right
RAD = right axis deviation
Rad = radial pulse
RBB = right bundle branch block
RCA = right circumflex artery
Resp = respiration
RL = ringer's lactate
RLQ = right lower quadrant
RR = respiratory rate
RSI = rapid sequence induction or intubation
RUQ = right upper quadrant
Rx = prescribed for
s = without (with macron)
s/p = status post
s/s = signs and symptoms
sec = second
SL = sublingual
SMC = St. Mary Corwin
SMOE = sensory, movement of extremity
SOB = shortness of breath
SpO₂ = Oxygen Saturation Percentage
SQ = subcutaneous
ST = S-T segment relative to ECG
STEMI – ST-Elevation Myocardial Infarction
Sux - Succinylcholine
synch = synchronous (switch on defibrillator)
Sz = seizure
TA = traffic accident
TAD = Trinidad Ambulance District
TFD = Trinidad Fire Department
TPD = Trinidad Police Department
TB = tuberculosis
TCA = tricyclic antidepressant
TCP = transcutaneous pacemaker
Temp = temperature
TIA = transient ischemic attack
TKO = to keep open (minimum IV rate)
TTC = Transportation Technology Center
Trans = transport
Tx = treatment
U/A = upon arrival
UGI = upper gastrointestinal
URI = upper respiratory infection
UTI = urinary tract infection
V = volt
VF = ventricular fibrillation
V. Fib. = ventricular fibrillation
VT = ventricular tachycardia
V. Tach. = ventricular tachycardia
VS = vital signs
WNL = within normal limits
W/D/G = warm, dry, good skin
WPW = Wolff-Parkinson-White syndrome
yo = years old

Patient Assessment

Scope-of-Practice

	FR	B	B+	I	P
ACT ALLOWED	X	X	X	X	X
STANDING ORDER	X	X	X	X	X

Scene Size-up

- BSI
- Scene Safety
- Mechanism of Illness (MOI) or Nature of Illness (NOI)
- Resources Needed
- C-Spine Precautions

Initial Assessment (IA)

- Chief Complaint (CC)
- General Impression
- Mental Status (AVPU)
- Airway/Breathing/Circulation (ABC)
- Transport Status

Patient History

- Onset, Provocation, Quality [of pain], Relief/Radiate/ [of pain], Severity, Time (OPQRST)
- Signs and Symptoms [of CC], Allergies, Medications, Pertinent Past History, Last Oral Intake, Events (SAMPLE)
- Associated Symptoms, Pertinent Negatives

Physical Exam (PE)

- Focused or Rapid Overall
- Vitals: Blood Pressure (BP), Heart Rate (HR), Respiratory Rate (RR), Pupils, Skin
- Head, Neck, Chest, Abdomen, Back, Pelvis, Extremities (DCAP-BTLS)

Treatment/Interventions

- Oxygen, C-Spine, Spinal Immobilization, Bleeding, Shock, Splinting...
- Oxygen, CPR, AED, Airway Obstruction...

Ongoing Assessment

- Repeat IA, Repeat PE or Detailed PE, Vitals, Reassess Treatment/Interventions

Report/Handoff

- Age, Sex, Chief Complaint, AVPU, ABC, Vitals, OPQRST, SAMPLE, PE/Detailed PE, Interventions, ETA, Questions

Documentation - SOAP

Scope-of-Practice

	FR	B	B+	I	P
ACT ALLOWED	X	X	X	X	X
STANDING ORDER	X	X	X	X	X

Subjective

- Document how you were dispatched and your response to the scene (Emergent, Immediate, or Non-emergent)
- Document **EVERYTHING** you are told by Dispatch, your Patient(s), Family, Bystanders, Police/Sheriff/State Patrol, Fire, and First Responders

Regarding:

- Chief Complaint, OPQRST, SAMPLE, Treatment/Interventions prior to your arrival, Associated Symptoms and Pertinent Negatives

Objective

- Document **EVERYTHING** you see, feel, hear, measure during assessment and examination

Regarding:

- General Impression
- AVPU (AAOx #, person, place, event)
- ABCs: Airway (open, maintained), Breathing (rate, quality, effort) Circulation (pulse, quality, rhythm), Blood Pressure
- SKIN (color, temperature, dry/sweaty)
- HEEN: Eyes (PEARL), Neurological, DCAP-BTLS
- CHEST: Breath Sounds (equal, clear, diminished, wheezes, rales, etc.), DCAP-BTLS
- ABD: soft, hard, tender, non-tender, guarding, DCAP-BTLS
- BACK/PELVIS: intact, DCAP-BTLS
- EXTREMITIES: intact, range-of-motion, pulse/motor/sensation (PMS), DCAP-BTLS

Assessment

- Field Diagnosis, Treatment Protocol(s)

Plan

- Document **EVERYTHING** you do for your patient(s)

Regarding:

- Response to scene
- Assessments, Examinations
- Treatments, Interventions, Standing Orders/Protocols followed, ALS/Medical Control Orders followed
- Patient response
- ALS/Medical Control/Dispatch updates
- Transport
- Report/Handoff, Transfer-of-care

Remember... If it isn't documented it didn't happen!