# ALTERNATE TRIAGE, TREATMENT AND TRANSPORT GUIDELINES FOR PANDEMIC INFLUENZA



**Bureau of Emergency Medical Services and Trauma System** 

Arizona Department of Health Services Created August 2010

Approved by the Medical Direction Commission 1/20/2011

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# **GD-101-PHS-EMS:** Alternate Triage, Treatment and Transport Guidelines for Pandemic Influenza

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#### PURPOSE AND SCOPE

Arizona recognizes that emergency medical services (EMS) may be overwhelmed during an influenza pandemic and has developed, with the assistance of numerous clinical and operational experts, this Alternate Triage, Treatment and Transport Guideline (ATTTG) document as a resource for EMS providers during an influenza pandemic and/or a public health emergency declared by the Governor of Arizona. It is intended to provide a framework for Arizona's statewide EMS system in order to optimize the delivery of emergency care and 9-1-1 services when resources are limited or overloaded during a public health emergency related to pandemic influenza.

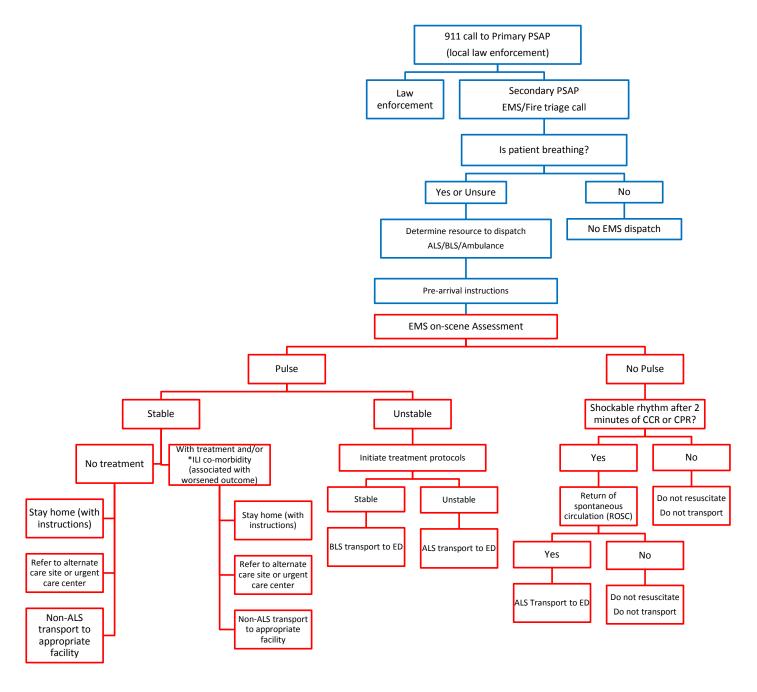
### **DISCLAIMER**

These guidelines are designed to be a resource document for use by physicians serving as Medical Direction Authorities for the administrative, organizational and on-line medical direction of pre-hospital EMS personnel during an influenza pandemic and a public health emergency declared by the Governor of Arizona. It is recognized that variations from the guidelines contained within are acceptable, depending on the individual circumstances of the involved areas and organizations.

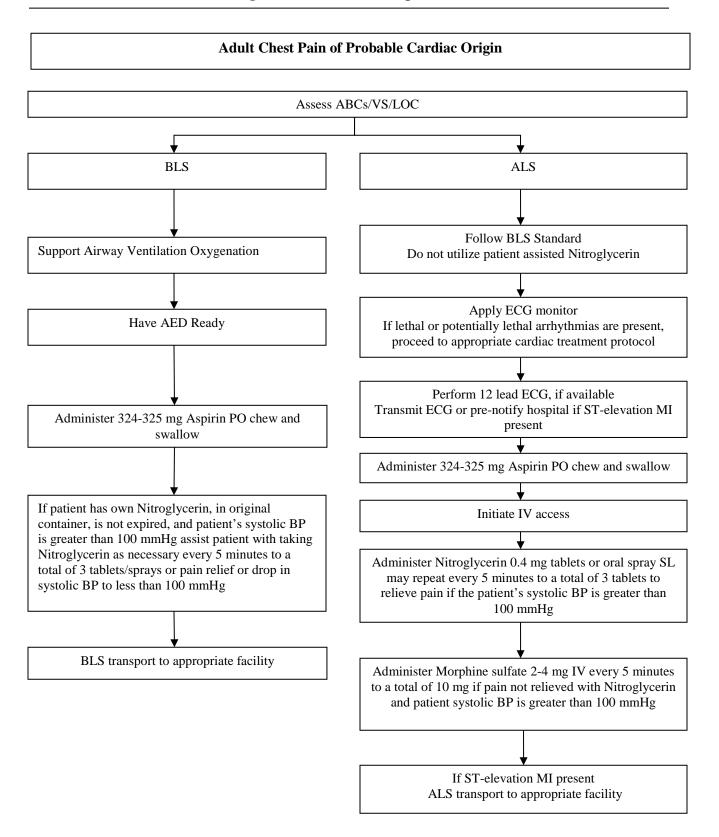
By Arizona Statute and Rule, all advanced life support pre-hospital EMS personnel shall have administrative and on-line medical direction. These guidelines are not meant to act as a substitute, proxy or alternative to that medical direction. Any conflict between these guidelines and the individual EMS provider's medical direction shall default to the Administrative or on-line medical direction.

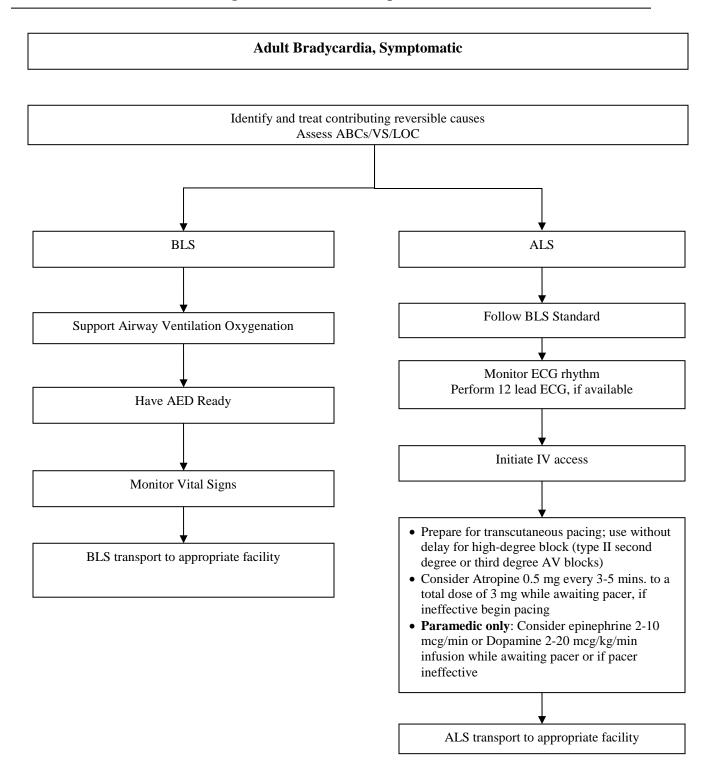
This guidance document outlines optional triage, treatment and transport methods for consideration during a public health emergency due to pandemic influenza. It is specifically recognized that there are acceptable variations from these guidelines. This guidance does NOT define, limit, expand, or otherwise purport to establish the legal standard of care. Local protocols for Cardiocerebral Resuscitation (CCR) or Cardiopulmonary Resuscitation (CPR) shall remain in effect.

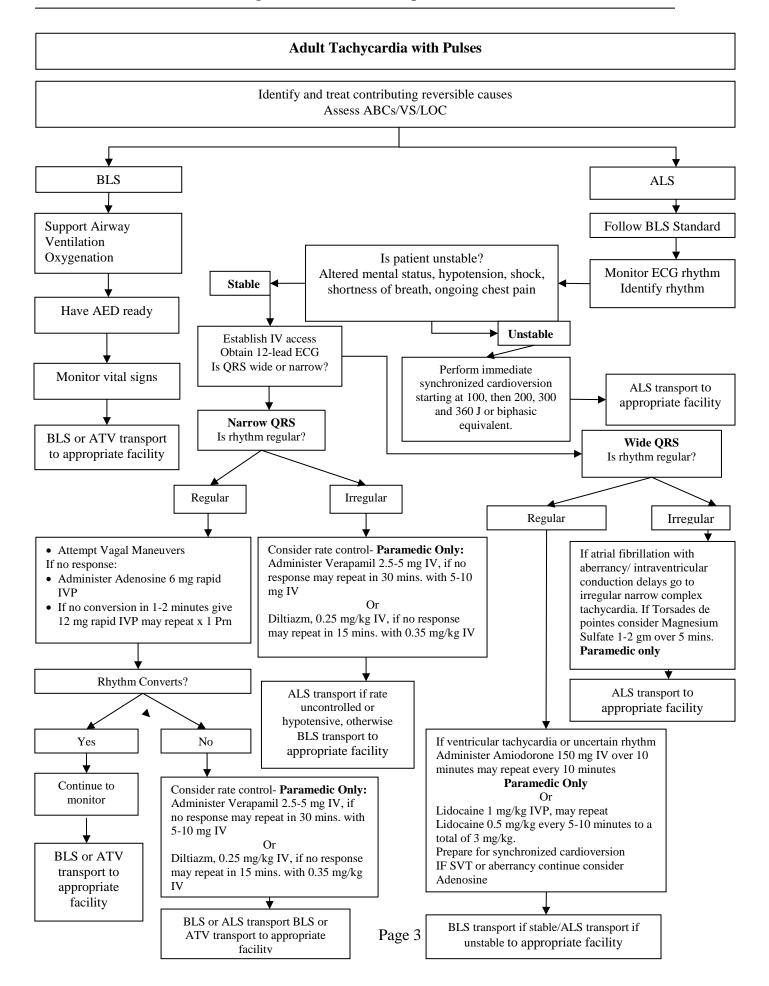
## General Adult and Pediatric Alternate Triage, Treatment and Transport Guidelines For Pandemic Influenza



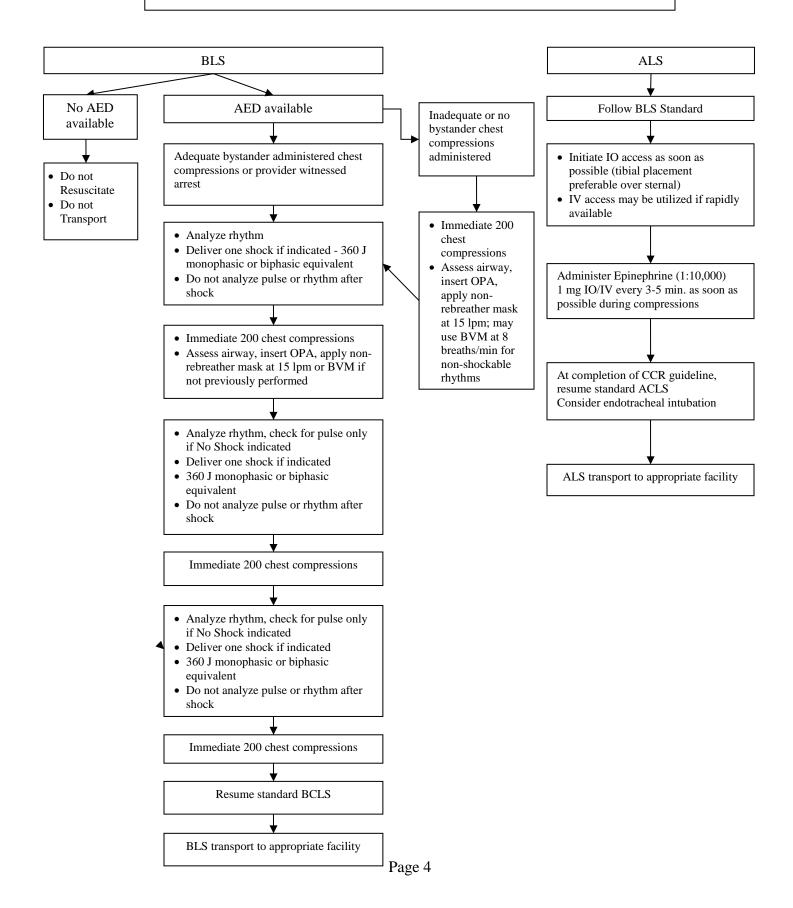
\*Influenza-Like Illness (ILI) co-morbidities <u>may</u> include: Obesity (body mass index [BMI] ≥30), pregnancy, asthma, age (≥65, < 5, especially < 2 years old), People with medical conditions such as: Neurological and neurodevelopmental conditions [including disorders of the brain, spinal cord, peripheral nerve, & muscle such as cerebral palsy, epilepsy (seizure disorders), stroke, intellectual disability (mental retardation), moderate to severe developmental delay, muscular dystrophy, or spinal cord injury]; Chronic lung disease (chronic obstructive pulmonary disease [COPD] & cystic fibrosis); Heart disease (congenital heart disease, congestive heart failure & coronary artery disease); Blood disorders (e.g. sickle cell disease); Endocrine disorders (e.g. diabetes mellitus); Kidney disorders; Liver disorders; Metabolic disorders (e.g. inherited metabolic disorders and mitochondrial disorders); Weakened immune system due to disease or medication (e.g. people with HIV or AIDS, or cancer, or those on chronic steroids); People < 19 years of age receiving long-term aspirin therapy; Chronic Obstructive Pulmonary Disease (COPD)

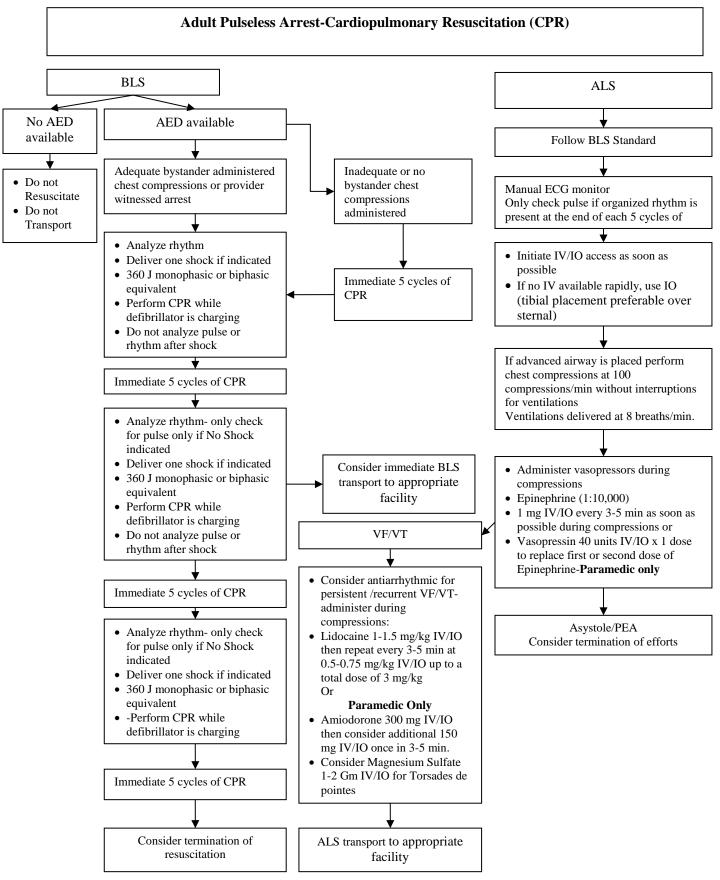






#### Adult Pulseless Arrest-Cardiocerebral Resuscitation (CCR)

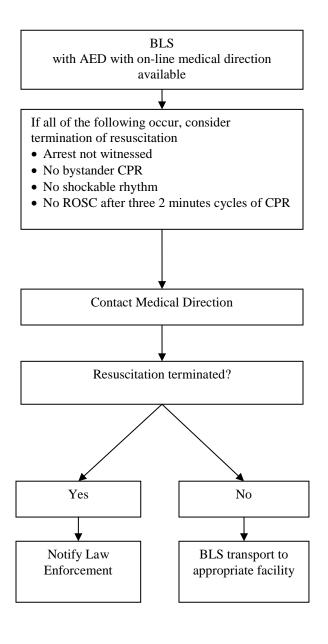


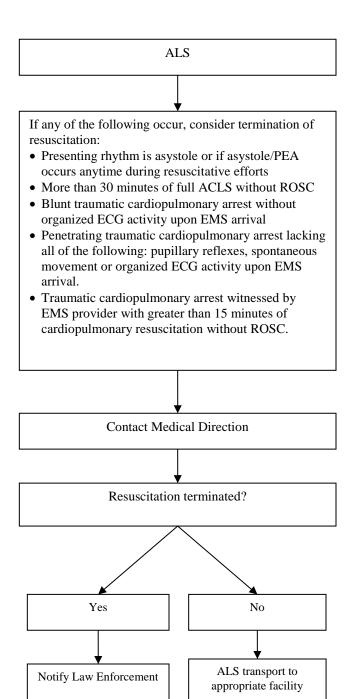


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# **Adult Termination of Resuscitation Efforts**

[Environmental Hypothermia not Present]



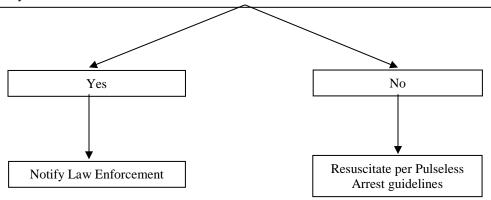


## **Adult Dead On-Scene**

Assess patient for:

- Decapitation
- Decomposition
- Burned beyond recognition
- Rigor mortis and/or dependent lividity with apnea, pulseless, asystole in more than 1 lead or No Shock indicated on AED

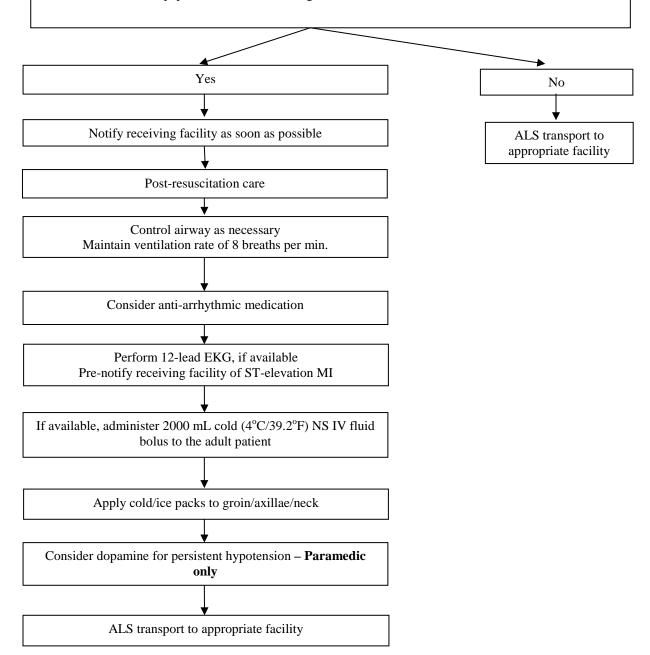
Are any of these indicated?

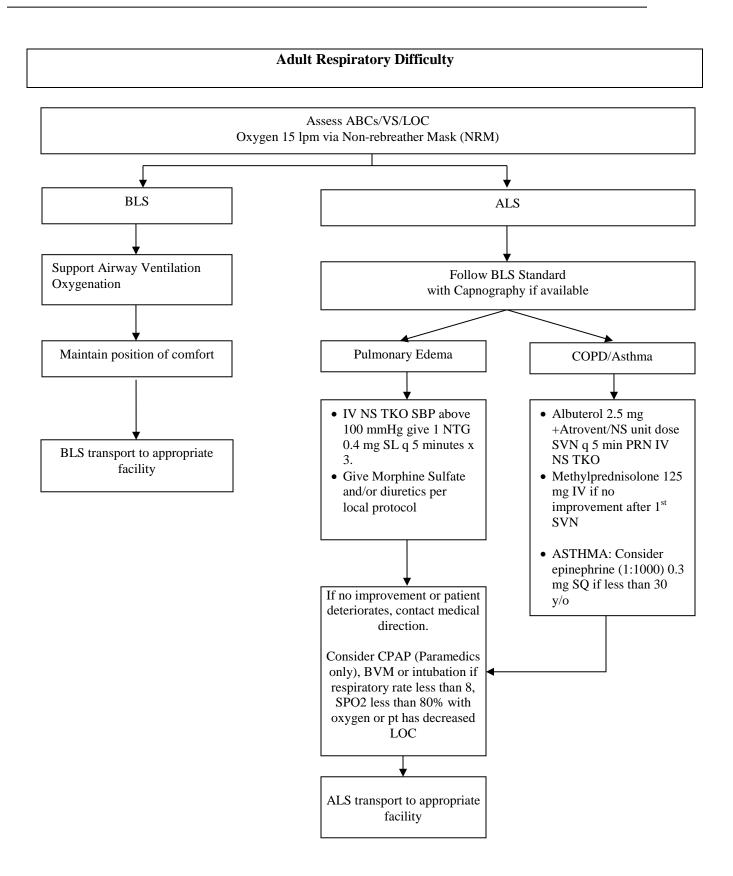


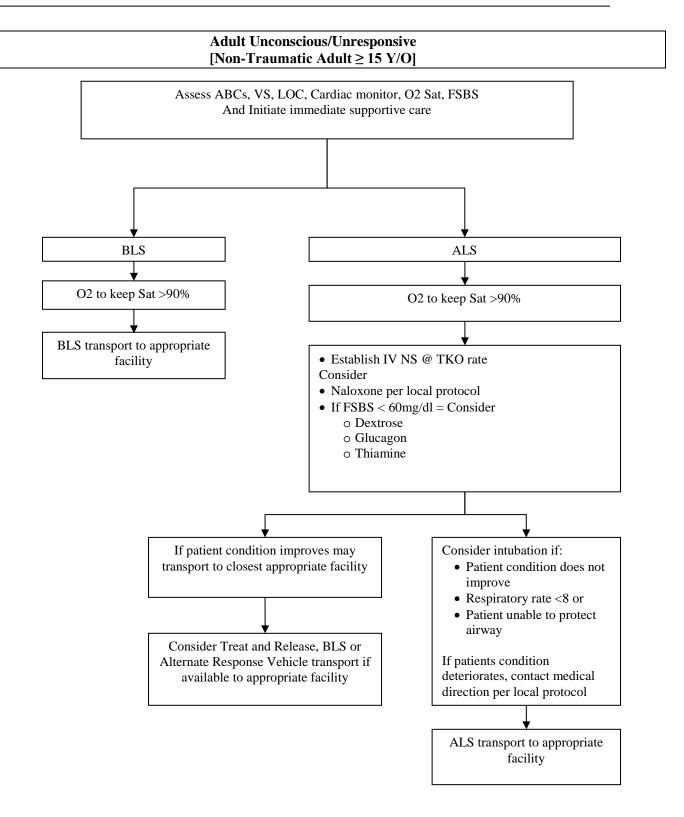
# Adult Transport to Designated Cardiac Arrest Center/Cardiac Arrest Post-Resuscitation (CRC)

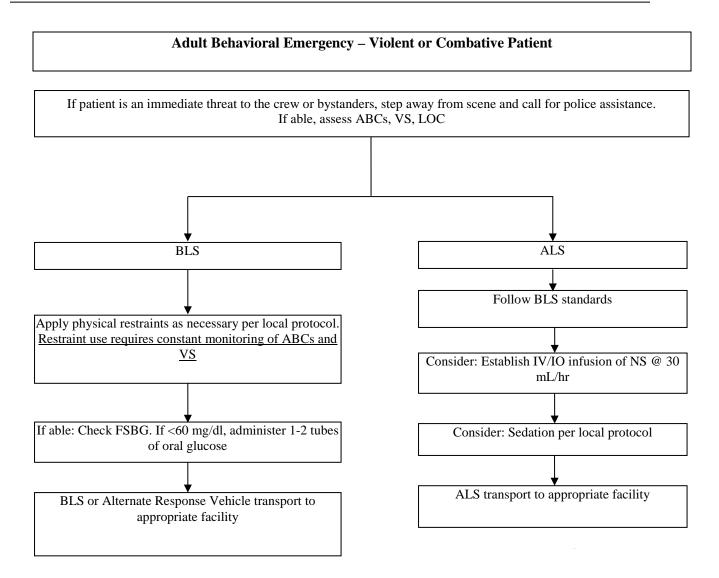
#### Inclusion Criteria:

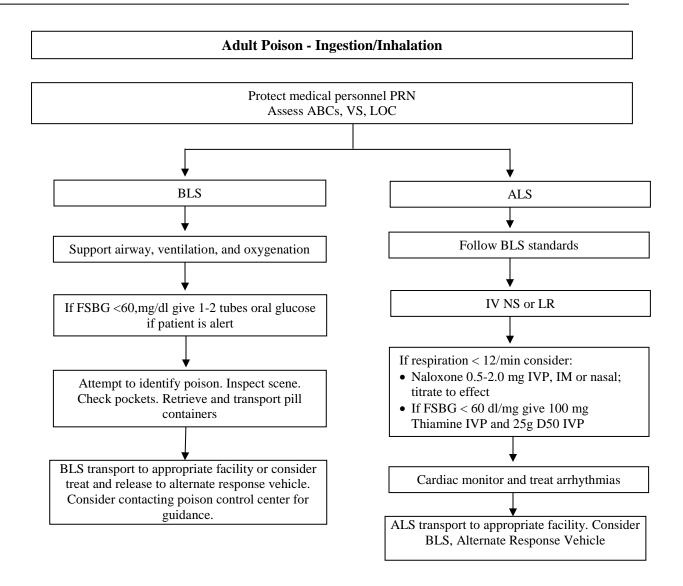
- Non-traumatic OHCA with return of palpable central pulses or other evidence of spontaneous circulation
- GCS less than 8 after ROSC
- Transport to CRC when feasible, resources available, and will add less than 15 minutes to transport time compared to transport to non-CRC
- Less than 30 minutes CPR/CCR prior to arrival of EMS
- Patient not pregnant
- No uncontrolled hemorrhage
- No persistent unstable arrhythmia
- Patient does not appear to have sever environmental hypothermia related arrhythmia
- No DNR paperwork identified during resuscitation

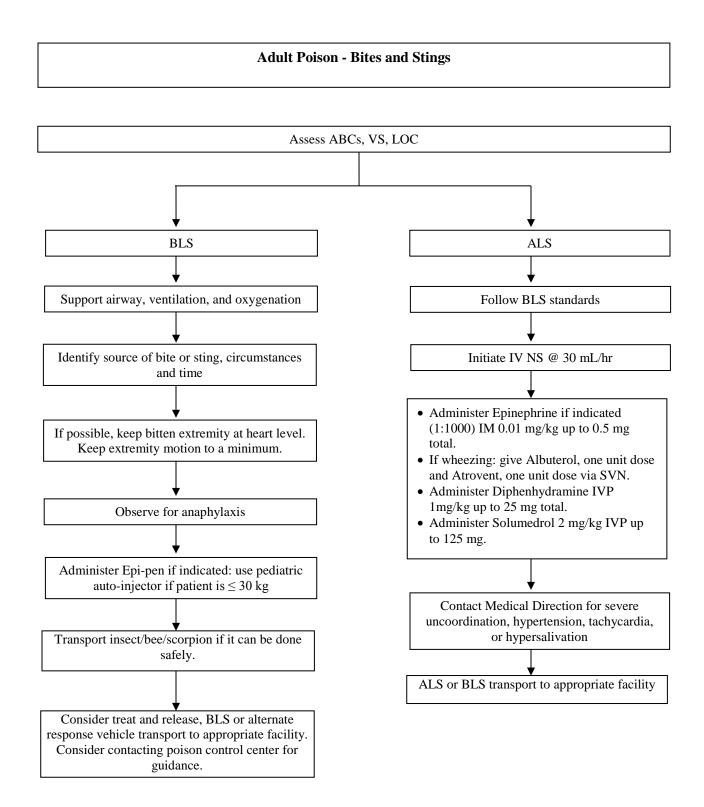




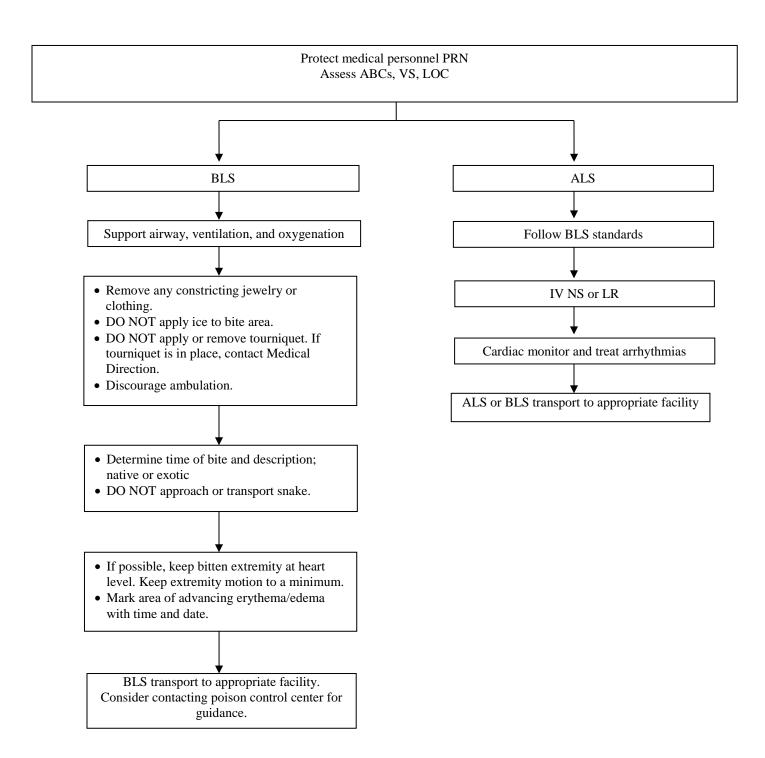


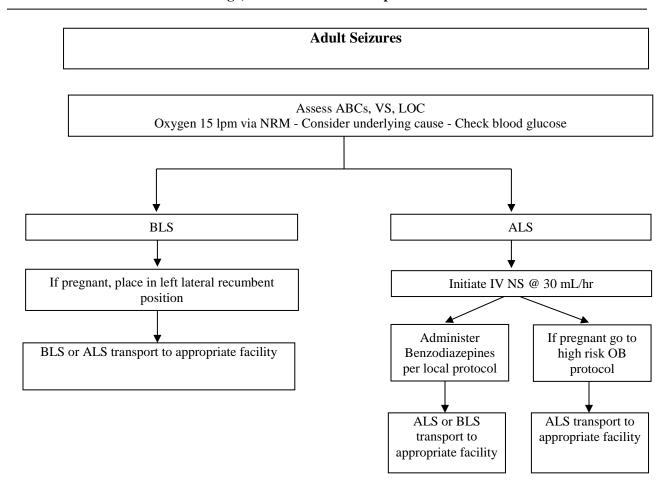


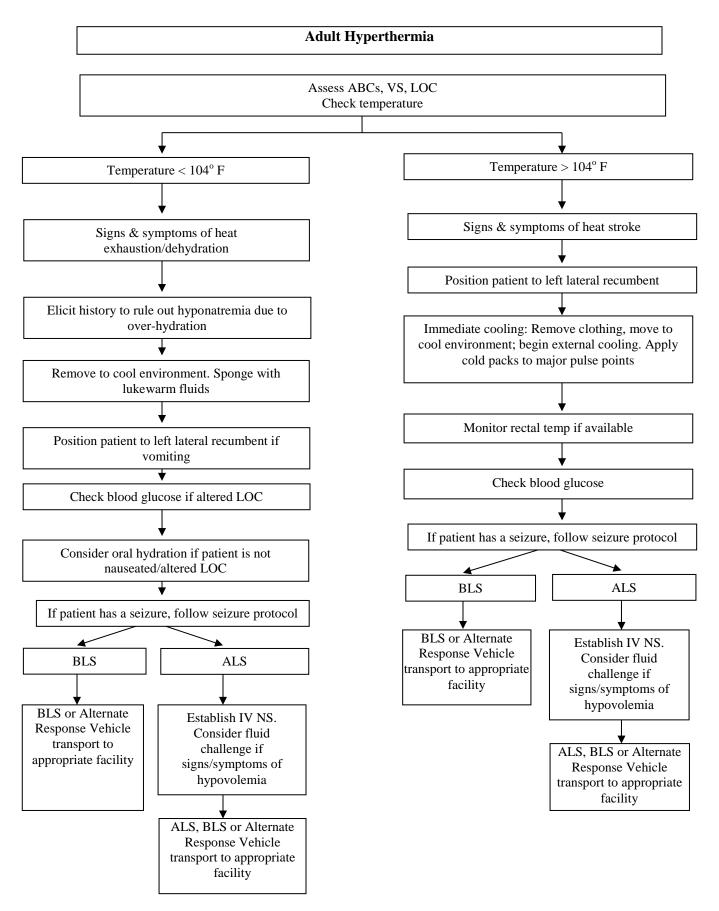


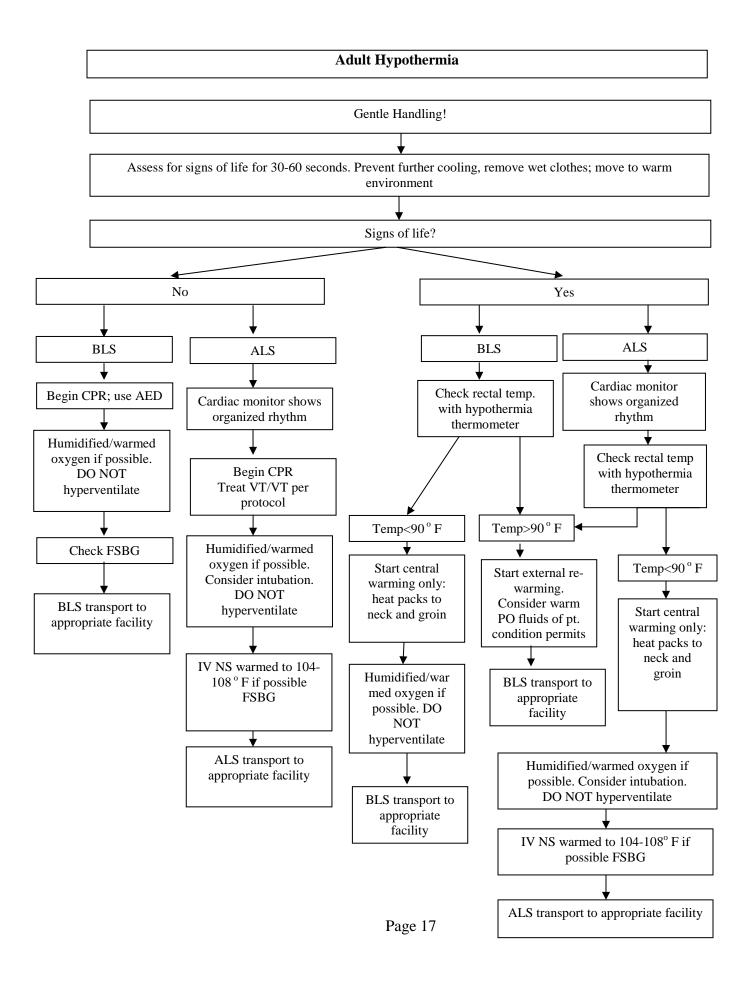


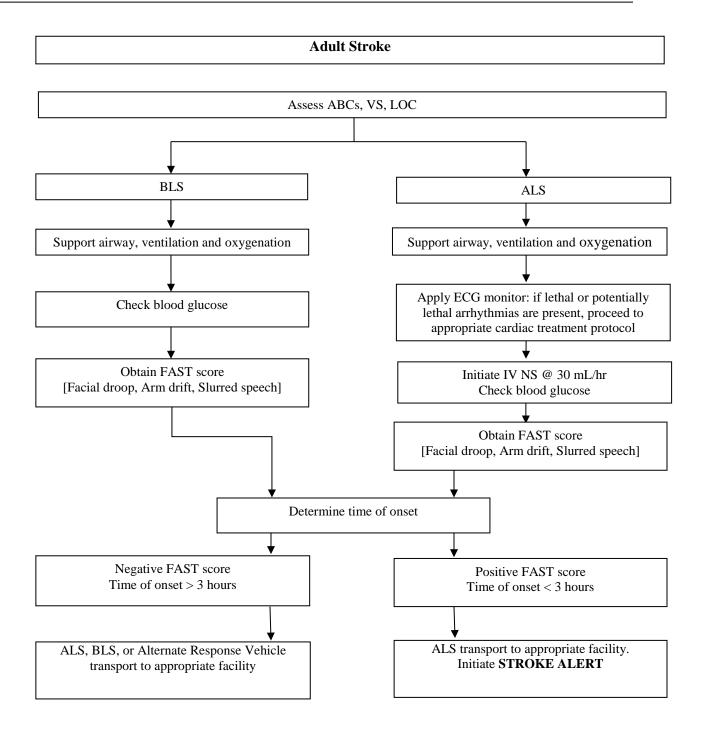
# Adult Poison – Snakebite

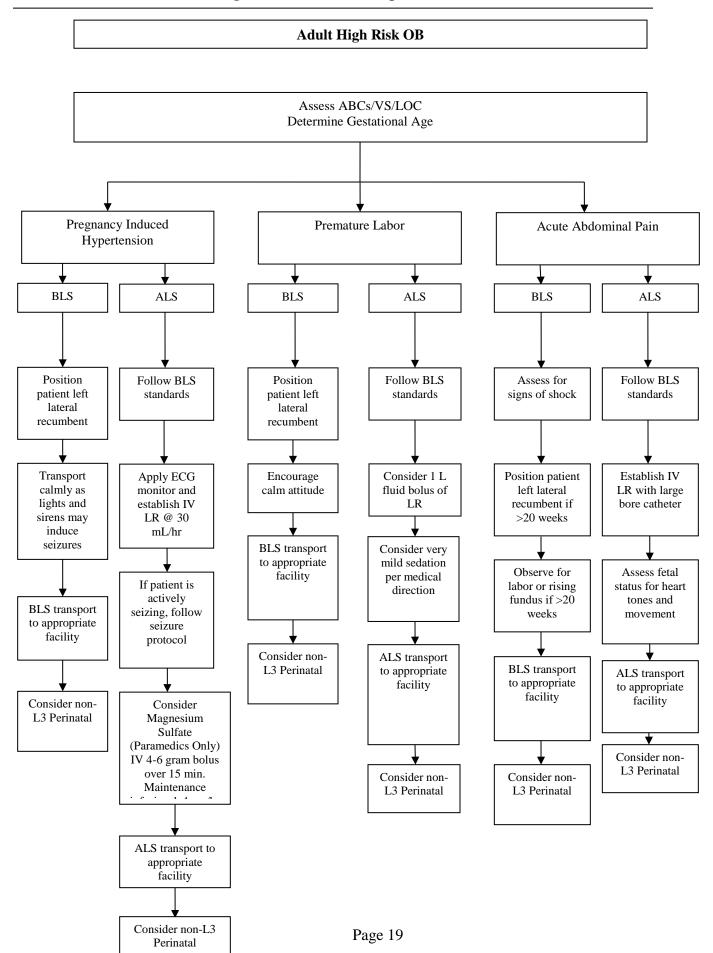


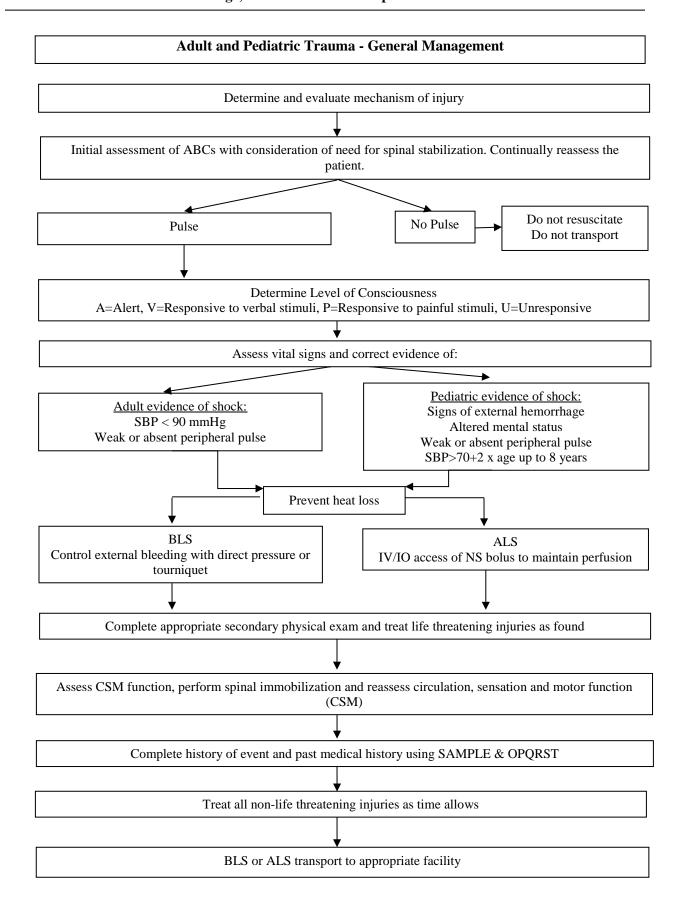




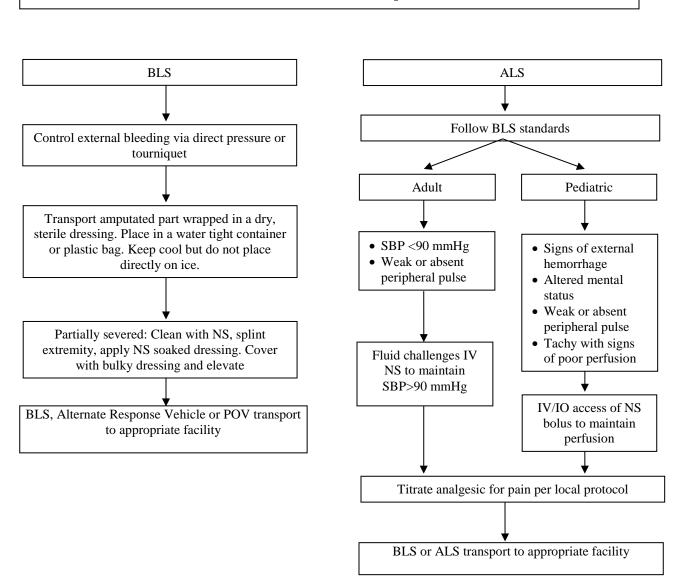


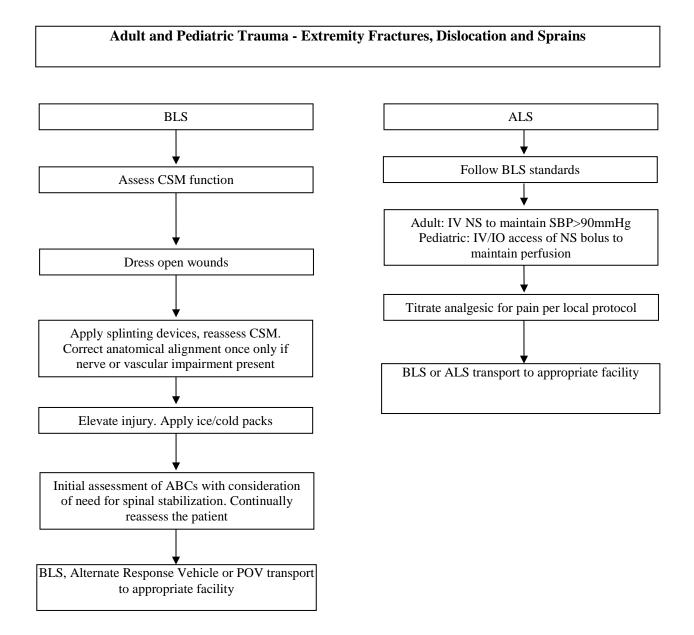


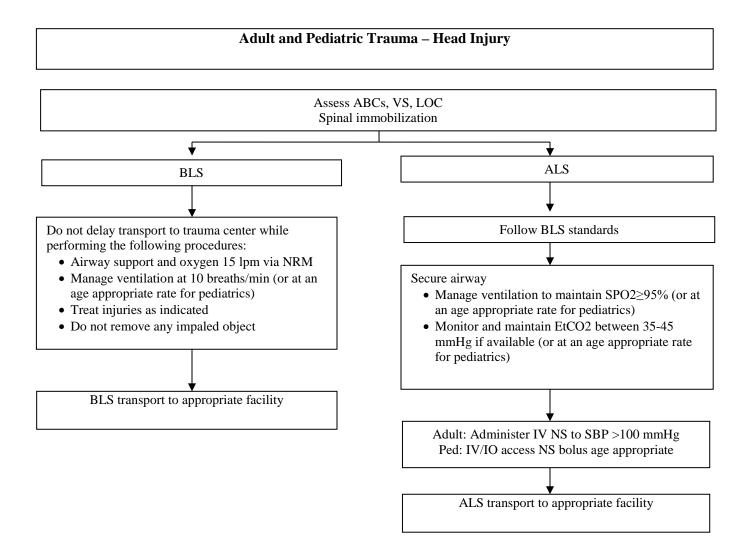




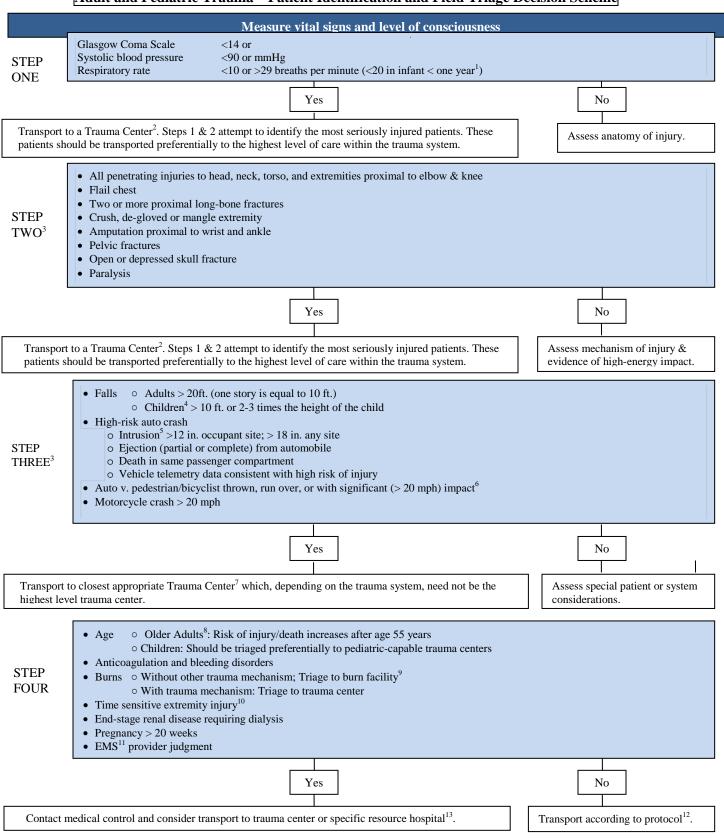
### **Adult and Pediatric Trauma - Amputated Parts**







## Adult and Pediatric Trauma – Patient Identification and Field Triage Decision Scheme



WHEN IN DOUBT, TRANSPORT TO A TRAUMA CENTER.

#### FIELD TRIAGE SCHEME FOOTNOTES

- <sup>1</sup> The upper limit of respiratory rate in infants is >29 breathe per minute to maintain a higher level of over-triage for infants.
- <sup>2</sup> Trauma centers are designated Level I-IV, with Level I representing the highest level of trauma care available.
- <sup>3</sup> Any injury noted in Step Two or Step Three triggers a "YES" response.
- <sup>4</sup> Age <15 years
- <sup>5</sup> Intrusion refers to interior compartment intrusion, as opposed to deformation which refers to exterior damage.
- <sup>6</sup> Includes pedestrians or bicyclists thrown or run over by a motor vehicle or those with estimated impact >20 mph with a motor vehicle.
- <sup>7</sup>Local or regional protocols should be used to determine the most appropriate level of trauma center; appropriate center need not be Level I.
- <sup>8</sup> Age >55 years.
- <sup>9</sup>Patients with both burns and concomitant trauma for whom the burn injury poses the greatest risk for morbidity and mortality should be transferred to a burn center. If the non-burn trauma presents a greater immediate risk, the patient may be stabilized in a trauma center and then transferred to a burn center.
- <sup>10</sup> Injuries such as an open fracture or fracture with neurovascular compromise.
- 11 Emergency medical services.
- <sup>12</sup> Patients who do not meet any of the triage criteria in Steps One through Four should be transported to the most appropriate medical facility as outlined in local EMS protocols.
- <sup>13</sup> In most circumstances patients undergoing CPR should not be transported by Air Ambulance.

#### ARIZONA TRAUMA MODE OF TRANSPORT GUIDELINE

The decision for mode of transport for both field and inter-facility trauma patients is based on the premise that the time to definitive care and quality of care are critical to achieving optimal outcomes. Factors of distance, injury severity, road conditions, and traffic patterns must be considered when choosing between air or ground transport. The skill level of the transport team must also be considered.

When considering air transport, the amount of time saved should be significant enough to allow a potentially beneficial intervention to take place at the receiving facility. Time considerations should take into account arranging for air transport, patient packaging, transport to the aircraft and transport of the patient from the helipad or airport to the trauma bay. The referring physician will collaborate with the receiving physician and transport service providers to determine the appropriate mode of transport, based on the patient's condition, and the above mentioned factors.

The potential benefit to the patient should outweigh the risk associated with Air Ambulance transport.

#### INTER-FACILITY TRAUMA TRANSPORTS

Background: Trauma transports from one hospital to another for a higher level of care typically fall into one of two broad types:

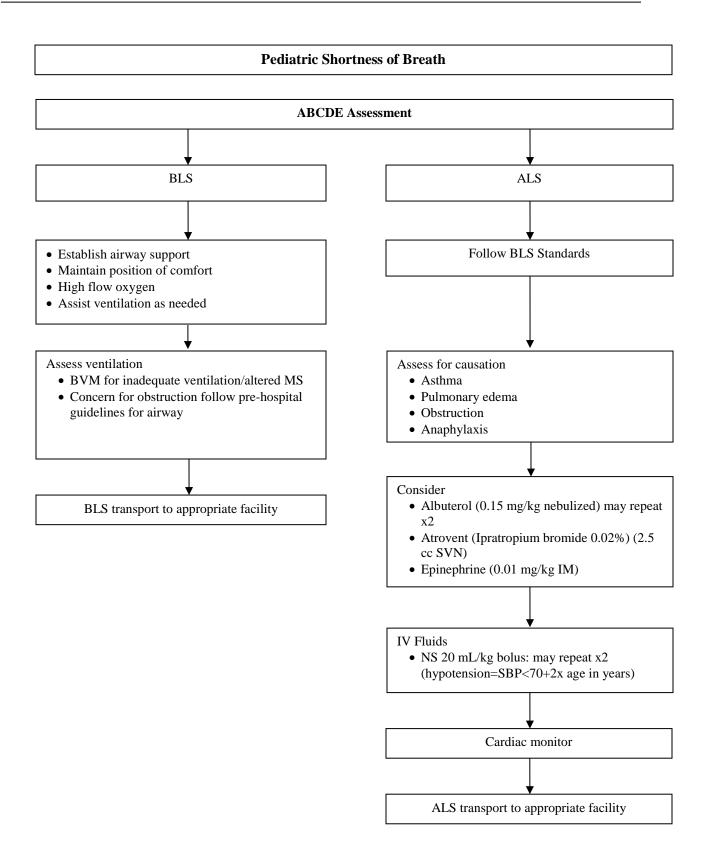
- 1. Those in which a quicker form of transport may make a difference in treatment/outcome.
- 2. Those in which a quicker form of transport may not make a difference in treatment/outcome.

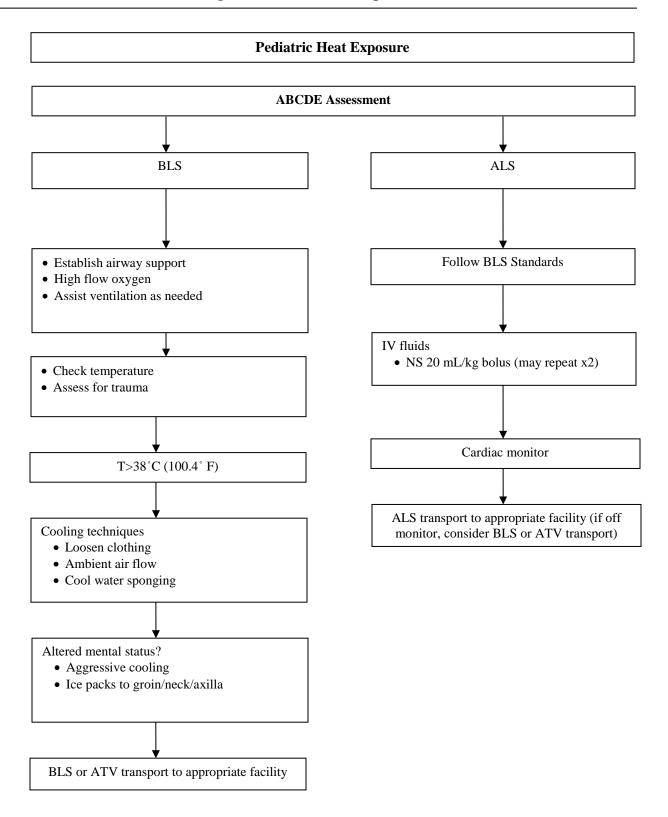
Assumptions: Assumption for the purposes of these examples:

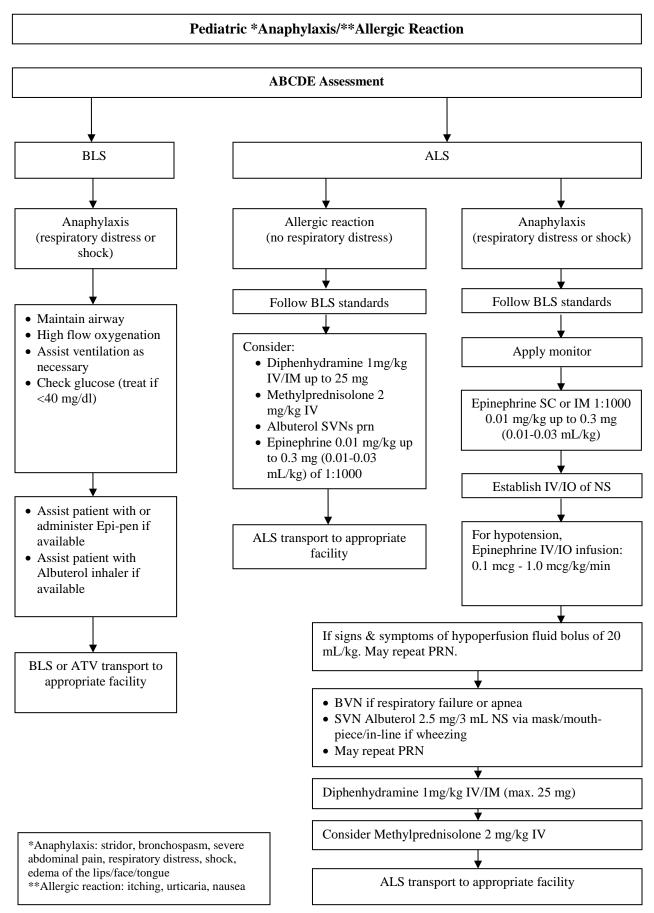
- 1. Helicopter transport will be quicker, but more expensive.
- 2. There are no weather or road issues that would make air transport preferable to ground transport or ground transport preferable to air transport.

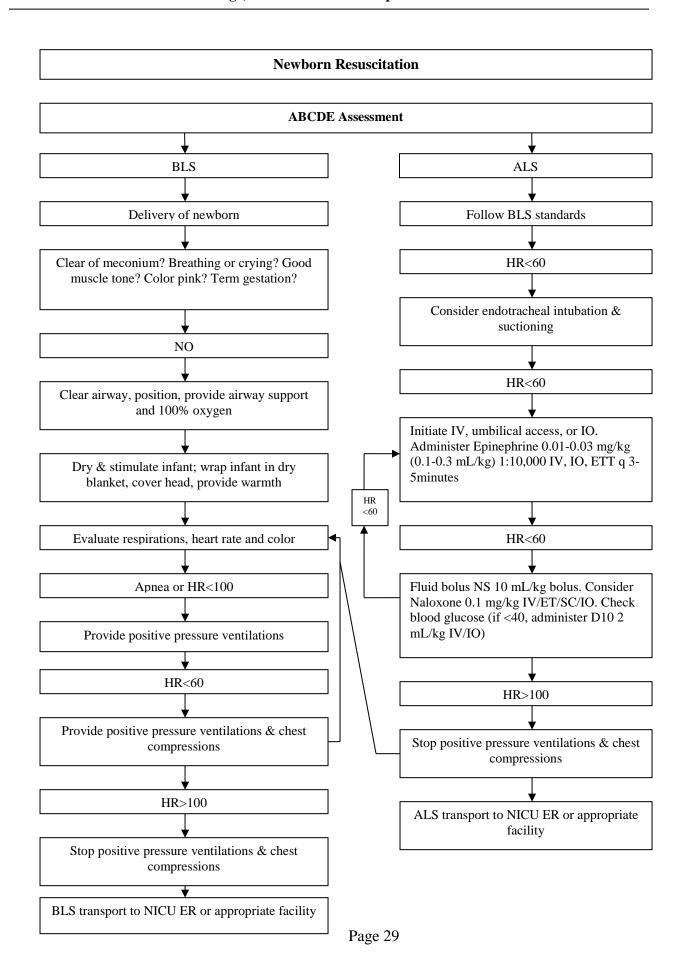
Examples: Not intended to cover all potential circumstances.

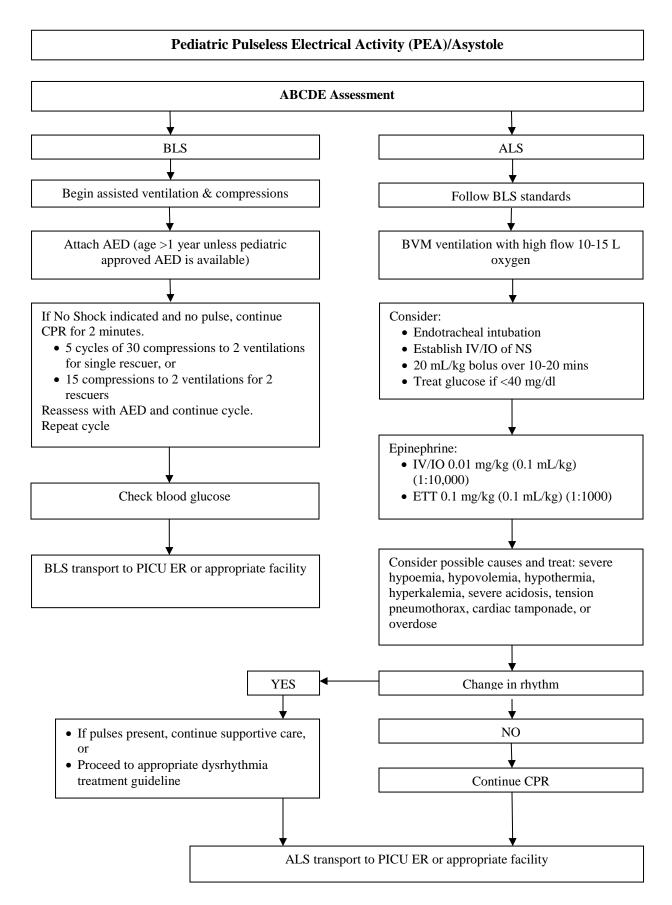
Examples: 1 tot intended to cover an potential engangements.		
Quicker Form of Transport (Helicopter) - <u>May</u> Make a Difference in Outcome	Quicker Form of Transport (Helicopter) - May Not Make a Difference in Outcome	
1. Patient with suspected aortic injury as seen on chest X-ray or CT scan.	1. Patient with 2 broken ribs, no pneumothorax and who is breathing fine.	
2. Patient with an open book pelvis.	2. Patent with a minor pelvic fracture and hemodynamically stable.	
3. Patient with a Glasgow Coma Scale (GCS) less than 12 and the GCS is decreasing.	3. Patient with a concussion and normal CT scan of the brain; or if no CT, then a GCS of 15 and mentating appropriately.	
4. Patient with a stab wound to the abdomen near the upper right abdomen.	4. Stab wound to the arm with decreased sensation but normal pluses, no "tightness", and no significant on-going blood loss.	
5. Patient with a gun-shot wound to the thigh with decreased pulses.	5. Patent with gun-shot wound to the thigh with excellent pulses, no expanding thigh, and no significant on-going	
6. Patent with blunt trauma and signs of shock.	blood loss.	

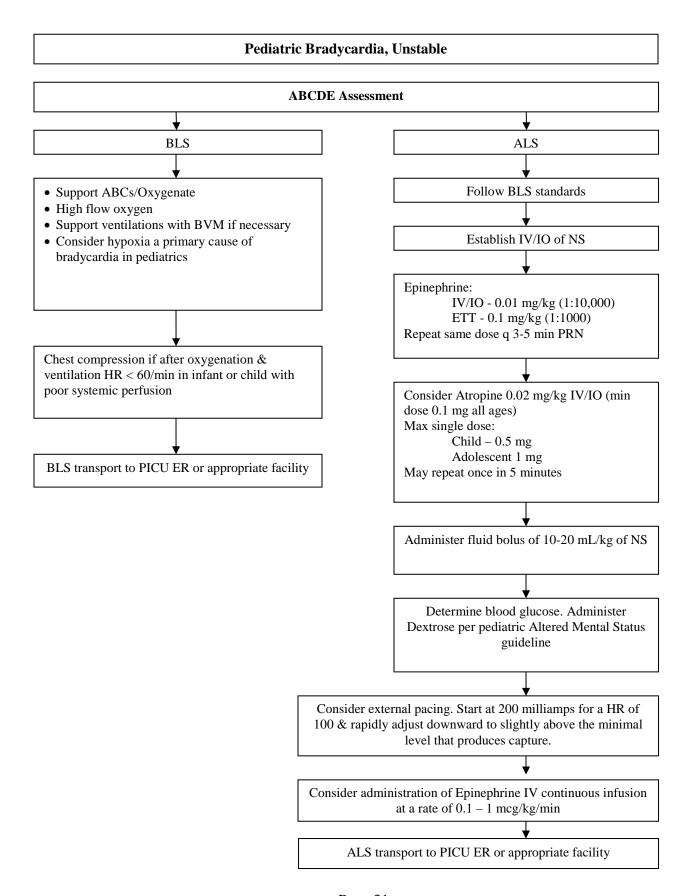


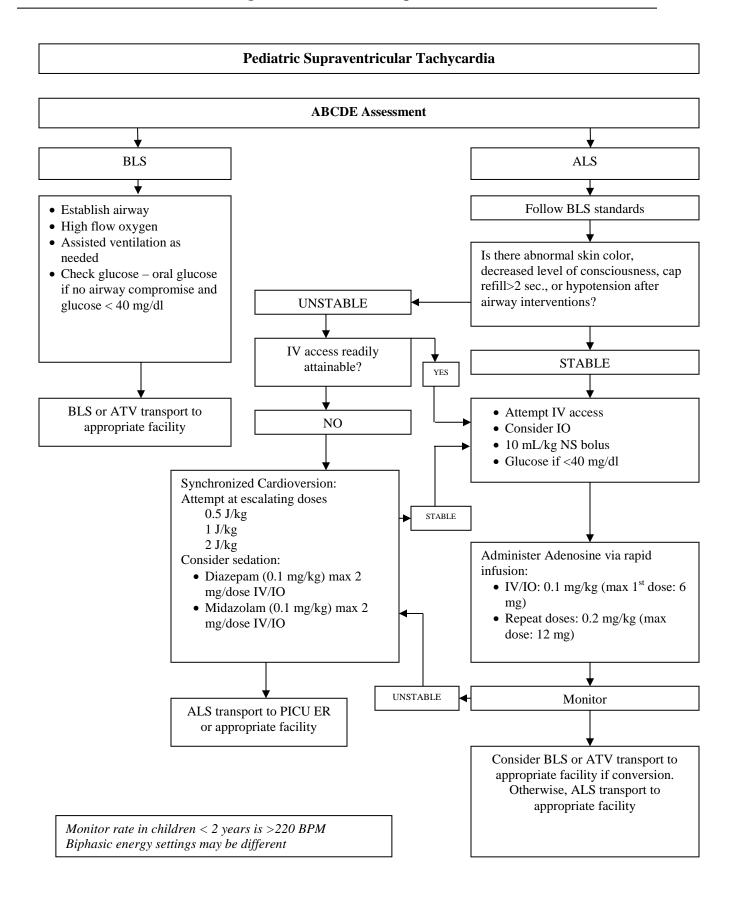


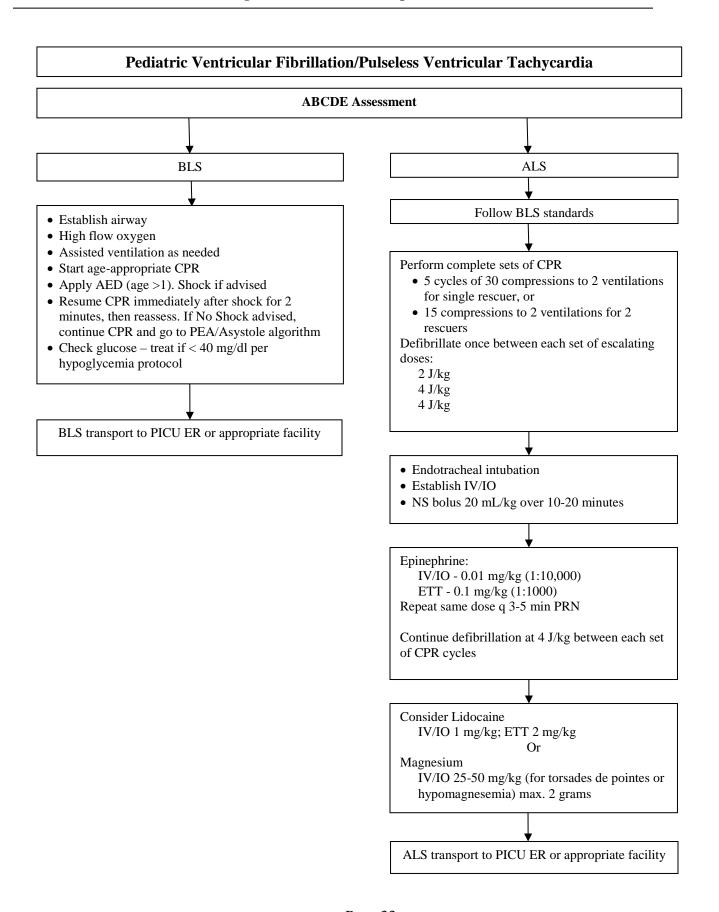


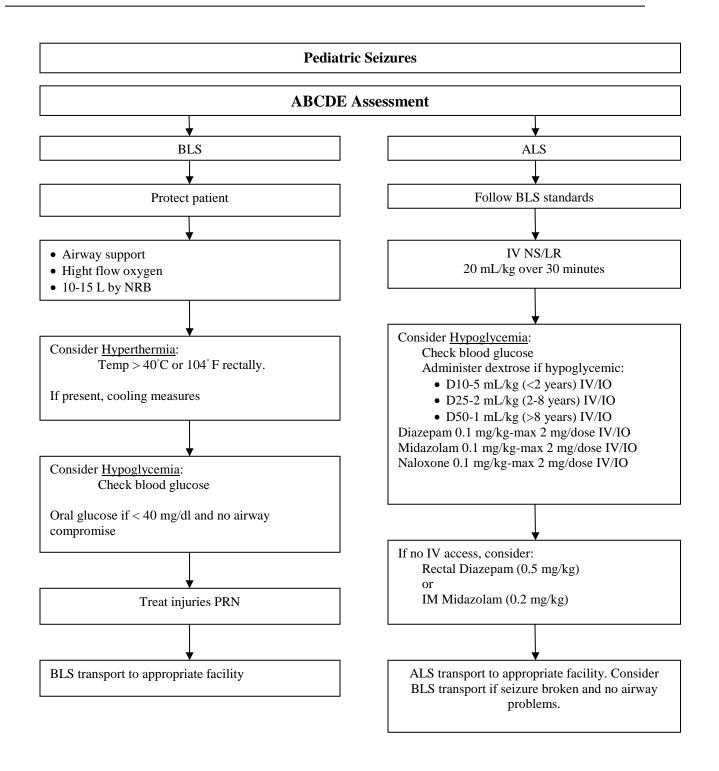


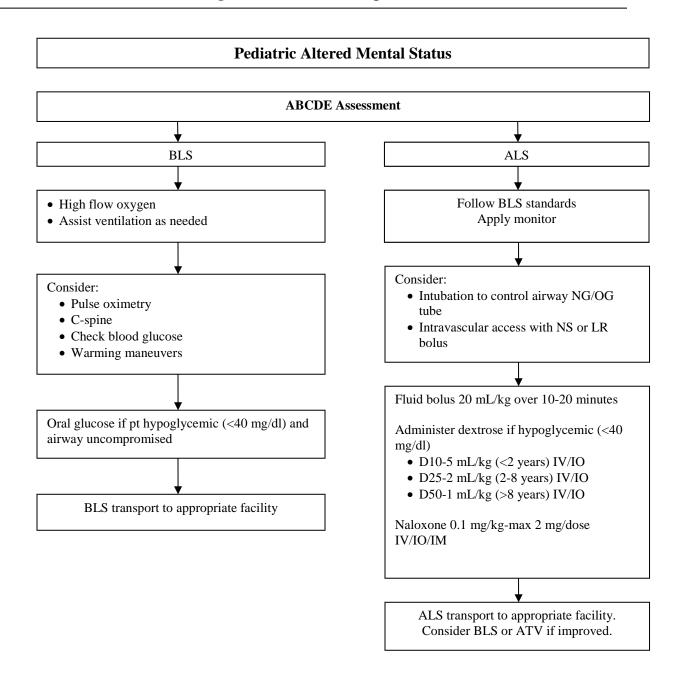


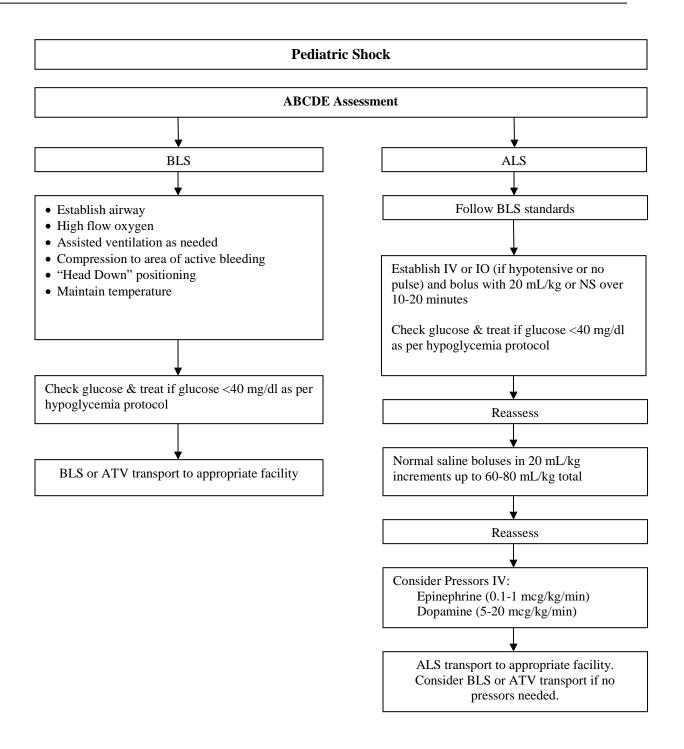


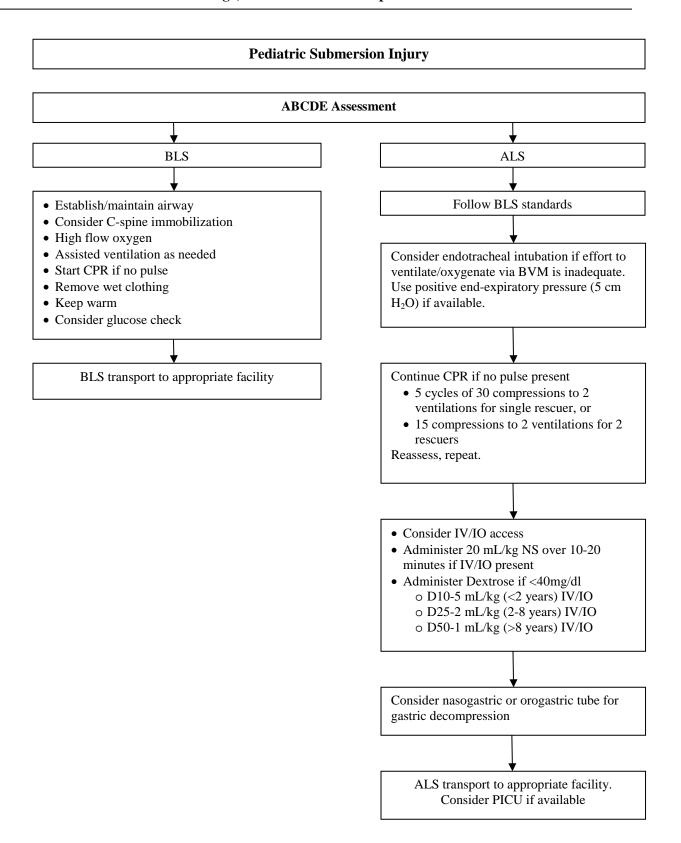












# **GLOSSARY**

ABCDE	Airway, Breathing, Circulation, Disability and Exposure
ACLS	Advanced Cardiac Life Support
AED	Automated External Defibrillator
ALOC	Altered level of consciousness
ALS	Advanced Life Support
ATV	Alternate Transport Vehicle
BCLS	Basic Cardiac Life Support
BLS	Basic Life Support
BVM	Bag Valve Mask
CCR	Cardiocerebral Resuscitation
CPAP	Continuous Positive Airway Pressure
CPR	Cardiopulmonary Resuscitation
CRC	Cardiac Receiving/Referral Center
DNR	Do Not Resuscitate
ECG	Electrocardiogram
EMS	Emergency Medical Services
FSBS	Fingerstick Blood Sugar
GCS	Glasgow Coma Scale
IO	Intraosseous
IV	Intravenous
IVP	Intravenous Push
LOC	Level of Consciousness
LR	Lactated Ringers
NS	Normal Saline
NTG	Nitroglycerin
OHCA	Out of Hospital Cardiac Arrest
OPA	Oropharyngeal Airway
PEA	Pulseless Electric Activity
PICU ER	Pediatric ICU with Emergency Room
PO	By Mouth
PRN	As Needed
ROSC	Restoration of Spontaneous Circulation
SL	Sublingual
SVT	Supraventricular Tachycardia
TKO	To Keep (Venous Infusion Line) Open
VF	Ventricular Fibrillation
VT	Ventricular Tachycardia
VS	Vital Signs