ADULT

MEDICAL

EMERGENCIES

Revised: October 2016

Reviewed 2023

INITIAL MEDICAL CARE

FR/BLS TREATMENT:

1. Place the patient in a position of comfort; loosen any tight clothing, reassure and calm the patient. Sit the patient in an upright position if more comfortable and not hypotensive.
2. Administer OXYGEN by appropriate method when indicated and attempt to maintain oxygen saturation at 94-99%.
3. If patient has inadequate ventilation or respiratory effort refer to the UNIVERSAL AIRWAY ALGORITHM.
4. Perform patient assessment and obtain SAMPLE history and vital signs, including Blood Glucose. Check for medical alert tags or cards.
5. Repeat and record vital signs every 5 to 15 minutes and relay any significant changes to persons who continue patient care.
6. Initiate transport** **Consider intercept per INTERCEPT CRITERIA.**
7. Contact Medical Control.
8. If patient becomes pulseless and apneic, begin CPR and refer to CARDIOPULMONARY ARREST Protocol.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT.**
2. ILS interventions are to be performed, apply cardiac monitor prior to intervention(s)
3. Consider the need for an advanced airway; refer to the UNIVERSAL AIRWAY ALGORITHM.
4. If patient needs immediate intubation requiring conscious sedation, refer to MEDICATION ASSISTED INTUBATION protocol
5. Perform 12-lead EKG (if available) within 10 minutes of patient contact and transmit to receiving facility (if available).
6. Obtain vascular access if needed.

**** Only if transporting agency.**

ADULT FOREIGN BODY AIRWAY OBSTRUCTION

CRITERIA:

1. Respiratory difficulty
2. Suspected upper airway foreign body obstruction

TREATMENT: ALL LEVELS

Conscious patient – able to speak:

1. **INITIAL MEDICAL CARE**.
2. Leave patient alone; offer reassurance.
3. Encourage coughing.

Conscious patient – unable to speak:

1. Administer abdominal thrusts until the foreign body is expelled or until the patient becomes unconscious.
2. After the obstruction is relieved, reassess the airway, lung sounds, skin color and vital signs.
3. **INITIAL MEDICAL CARE**.

Unconscious patient

1. Place patient in a supine position and begin chest compressions.
2. Open the airway and check for FBAO. If object is visible, perform finger sweep to remove.
3. If object is not visible, continue chest compressions until object dislodged.
4. **ILS/ALS only:** Perform advanced airway control measures as available, using the UNIVERSAL AIRWAY ALGORITHM. Utilize Magill forceps as necessary.

ALCOHOL RELATED EMERGENCIES

EXCLUSION:

1. Conditions which may mimic alcohol consumption including:
    a. Diabetes
    b. Pneumonia
    c. Head injury
    d. Overdose

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**.
    a. Check blood glucose level
2. Treat patient in calm, firm manner.
3. If patient exhibits violent behavior, restrain as necessary per restraint guideline.
    a. Restrain in the presence of law enforcement wherever possible.
    b. Utilize a minimum of 4 personnel for safety.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT.**
2. Consider 20 ml/kg NS fluid bolus to maintain SBP of 90-100 or MAP > 65.

ALLERGIC REACTION/ANAPHYLAXIS

NOTE: **For patients experiencing a possible allergic reaction without serious signs or symptoms, perform Initial Medical Care and contact Medical Control.**

CRITERIA:

1. Possible exposure to allergen, including:
   a. Hives (Urticaria)
   b. Itching
   c. Swelling
   d. Rash
2. Respiratory difficulty or stridor
3. Signs and symptoms of shock

FR TREATMENT:

1. **INITIAL MEDICAL CARE**.
2. Relay information to incoming ambulance

BLS TREATMENT:

1. Continue **FR TREATMENT**.
2. EPINEPHRINE (1:1,000) 0.3 mg IM lateral thigh or deltoid.
3. DuoNeb nebulizer for wheezing. May repeat x2 if needed for continued

---

ILS/ALS TREATMENT:

1. Continue **BLS TREATMENT**.
2. If SBP < 90, administer 20 ml/kg NS fluid bolus. May repeat fluid bolus as needed to maintain SBP of 90-100 as long as lungs remain clear.
3. BENADRYL 50 mg IV or IM.
4. METHYLPREDNISOLONE (Solu-Medrol) 125 mg IV.
5. Reassess need for intubation if respiratory symptoms worsen or do not improve with treatment.

---

6. Consider additional EPINEPHRINE (1:1,000) 0.3 mg IM.
7. If patient experiences respiratory arrest, or if respiratory arrest is imminent, consider EPINEPHRINE (1:10,000) 0.1-0.3 mg IV over 5 minutes.

ALTERED LOC
UNCONSCIOUS/UNKNOWN ETIOLOGY

NOTE: **If narcotic overdose is suspected, administer NARCAN prior to DEXTROSE.**

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE.**
   a. Check blood glucose level.
2. Immobilize cervical spine if suspected spinal injury.
3. If blood glucose < 60 mg/dl (or suspected) **and** patient is conscious with an intact gag reflex, administer some form of ORAL GLUCOSE.
4. Perform F.A.S.T. Stroke Screen if suspect neurologic cause.
5. If **airway compromise** or **inadequate respiratory effort** present, administer intranasal NARCAN at 1 mg/ml per nostril via atomizer* (1 ml per nostril maximum; 2 mg total dose). May repeat in 2-3 minutes to a maximum dose of 4 mg if no response.
6. Relay information to incoming ambulance.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. IV NS KVO or saline lock.
3. If blood glucose < 60 mg/dl, administer DEXTROSE 50% 25 g IV.
4. If no IV access available, administer GLUCAGON 1 mg IM.
5. If **airway compromise** or **inadequate respiratory effort** present, administer NARCAN:
   IV or IM – 0.4 mg; may repeat every 2-3 minutes to a maximum dose of 4 mg, if no response.
   IN – 1 mg/ml per nostril via atomizer* (1 ml per nostril maximum; 2 mg total dose). May repeat in 2-3 minutes to a maximum dose of 4 mg, if no response.
6. Reassess need for intubation. Refer to UNIVERSAL AIRWAY ALGORITHM.

***Intranasal medications must be administered through an atomizer; Maximum volume per nostril = 1 ml.**

BRONCHOSPASM/ASTHMA/COPD

CRITERIA:

1. Respiratory distress, may include:
    a. Tachypnea
    b. Use of accessory muscles
    c. Wheezing
    d. Diminished breath sounds
    e. Prolonged expiratory phase
    f. History of asthma, bronchitis, pneumonia, CHF or COPD

FR TREATMENT:

1. **INITIAL MEDICAL CARE**.
2. Relay information to incoming ambulance.

BLS TREATMENT:

1. Continue **FR TREATMENT**.
2. DuoNeb by nebulizer. May repeat x2 if needed for continued symptomatic relief.

ILS TREATMENT:

1. Continue **BLS TREATMENT**.
2. METHYLPREDNISOLONE (Solu-Medrol) 125 mg IV.
3. Consider CPAP application.
4. Assist ventilations with in-line nebulizer kit and BVM if necessary.
5. Reassess need for intubation if respiratory symptoms worsen or do not improve with treatment.

CYANIDE POISONING

NOTE: This protocol assumes a Cyanokit or Cyanide Antidote Kit is available on site.

CRITERIA:

1. Exposure to cyanide, including:
    a. Ingestion
    b. Inhalation
    c. Absorption through eyes, skin or mucous membranes
    d. Accidental or intentional injection
2. Signs and symptoms of poison exposure:
    a. Loss of Consciousness, Coma, Seizures, Apnea
    b. Anxiety/Hyperventilation, Tachycardia
    c. Headache, Nausea/Vomiting

FR/BLS TREATMENT:

1. Assure scene is safe and the patient has been decontaminated if needed.
2. **INITIAL MEDICAL CARE**.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. IV NS KVO or Saline Lock
3. **Cyanokit** 5 grams over 15 minutes
4. If **Cyanokit** is not available, may use **Cyanide Antidote Kit** per manufacturers recommendation.
5. Monitor patient

DIABETIC EMERGENCIES

NOTE: Hypoventilation generally indicates hypoglycemia; hyperventilation generally indicates hyperglycemia.

CRITERIA: (Any may be present)

1. Altered LOC, including:
    a. Blood glucose < 60 mg/dL
    b. History of diabetes
    c. Patient currently taking insulin or oral diabetic medication
2. Signs and symptoms of diabetic ketoacidosis (DKA):
    a. Nausea and vomiting
    b. Fruity or acetone breath odor
    c. Excessive thirst or urination
    d. Kussmaul respirations
3. Signs/symptoms of diabetic hyperosmolar non-ketotic coma, including:
    a. Blood glucose > 300 mg/dL
    b. Altered LOC
    c. Dehydration or hypotension

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**.
2. If blood glucose < 60 mg/dl (or suspected) **and** patient is responsive with a good gag reflex, administer some form of ORAL GLUCOSE.

ILS TREAMENT:

1. Continue **FR/BLS TREATMENT**.
2. If blood glucose < 60 mg/dl, administer DEXTROSE 50% 25 g IV.
3. If no IV access available, administer GLUCAGON 1 mg IM.
   May repeat in 5 minutes if no change in LOC.
4. If blood glucose > 300 mg/dl, administer NS at WO rate.

DROWNING

NOTE: Aggressive airway management is important in the near drowning patient. A high potential for associated conditions, such as cervical spine trauma and hypothermia, also exists. Refer to hypothermia and cervical spine injury protocols as necessary.

TREATMENT: ALL LEVELS

1. Approach scene with due caution for rescuer safety.
2. Remove patient from water with spinal motion restriction precautions.
3. **INITIAL MEDICAL CARE**.
4. If patient becomes pulseless and apneic, refer to CARDIOPULMONARY ARREST Protocol.
5. If patient presents with hypothermia, refer to ENVIRONMENTAL HYPOTHERMIA Protocol.

ENVIRONMENTAL HYPERTHERMIA

HEAT CRAMPS

CRITERIA:

1. Muscle pain secondary to profuse sweating, may include:
    a. Cramps in extremities or abdominal cramping

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**.
2. Remove patient to a cool environment.
3. If nausea and vomiting not present. Have patient drink 16-20 ounces (2 glasses) of electrolyte solution (i.e. Gatorade, Powerade)
4. DO NOT massage cramping muscles.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. If no response to electrolyte solution or none is available, obtain vascular access and administer a fluid bolus of 500 ml NS and reassess patient.
3. If patient remains symptomatic, repeat fluid bolus as long as lungs remain clear.

HEAT EXHAUSTION

CRITERIA:

1. Environmental heat exposure
2. Signs and symptoms of heat exhaustion, may include:
    a. Profuse perspiration
    b. Headache, fatigue, nausea and dizziness
    c. Skin pale and clammy
    d. Normal or decreased skin temperature
    e. Rapid weak pulse and decreased blood pressure.
    f. Shallow respirations

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**.
2. Remove patient to a cool environment.
3. Place patient in supine position with legs elevated.
4. Cool patient with water and fans; DO NOT induce shivering.
5. Avoid fluids by mouth, especially if patient is nauseated.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. Administer 500 ml NS fluid bolus and reassess patient.
3. If patient remains symptomatic, repeat fluid bolus as long as lungs remain clear.

ENVIRONMENTAL HYPERTHERMIA
(Continued)

HEAT STROKE

CRITERIA:

1. Hot, flushed, dry skin
2. Signs and symptoms of heat stroke, may include:
    a. Sudden onset temperature > 106 F
    b. Altered level of consciousness; may include coma or seizure.
    c. Hot, dry skin (late sign)

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**.
2. Remove patient to a cool environment.
3. Initiate active cooling:
    a. Remove patient's clothing; protect privacy.
    b. Apply cold packs to neck, groin and armpits.
    d. Cover patient with cool, wet sheets and fan.
    e. DO NOT induce shivering.
4. Be alert for seizures.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. Administer 500 ml NS fluid bolus. If patient remains symptomatic, repeat fluid bolus as long as lungs remain clear.
3. Be prepared to treat seizures.

ENVIRONMENTAL HYPOTHERMIA

HYPOTHERMIA (MODERATE)

CRITERIA:

1. Exposure to cold environment
2. Signs and symptoms of moderate hypothermia, including:
    a. Patient conscious - may be lethargic; Shivering; Pale, cold skin

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**.
2. Handle patient gently; DO NOT massage cold extremities.
3. Remove patient to warm environment; remove any wet clothing and replace with dry sheets and blankets.
4. Hot packs may be applied to arm pits, groin and abdominal areas.
5. Assess and treat for other injuries as necessary.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. Administer 500 ml NS fluid bolus. Use warmed fluid (102°-106°F) if available.
3. May repeat fluid bolus as needed as long as lungs remain clear.

HYPOTHERMIA (SEVERE)

CRITERIA:

1. Exposure to cold environment
2. Signs and symptoms of severe hypothermia, including:
    a. Decreased LOC, Cold skin, Inaudible heart tones, Unreactive pupils, Slow respirations

FR/BLS TREATMENT:

1. Continue **HYPOTHERMIA (MODERATE) Treatment**
2. Load and go situation; limit scene time to 10 minutes.
3. **INITIAL MEDICAL CARE**.
4. Cautiously assess pulse for one full minute; unnecessary CPR could precipitate ventricular fibrillation.
5. If patient is pulseless and apneic after one full minute, refer to HYPOTHERMIC CARDIAC ARREST protocol.
6. Establish airway **WITHOUT** using mechanical adjuncts; assist ventilations with BVM but **DO NOT HYPERVENTILATE.**

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. Administer 500 ml NS fluid bolus. Use warmed (102°-106°F) fluid if available.
3. May repeat fluid bolus as needed as long as lungs remain clear.

ENVIRONMENTAL HYPOTHERMIA
(Continued)

FROSTBITE

NOTE: Do not massage frostbitten extremities.

CRITERIA:

1. Cold exposure
2. Signs and symptoms of frostbite, including:
    a. Red, inflamed tissue
    b. Gray or mottled tissue
    c. Waxy tissue that is firm upon palpation.

TREATMENT: ALL LEVELS

1. Remove from cold.
2. **INITIAL MEDICAL CARE**.
3. Cover frostbitten nose or ears with a warm hand.
4. Have patient place frostbitten hand in his/her armpit.

5. If ETA is greater than 60 minutes, begin active rewarming:
    a. Immerse extremity in water maintained at a temperature of 100-105 F.
    b. Rewarming should take 30-60 minutes.
    c. Rewarming is complete when frozen area is warm to touch and deep red or bluish in color.
    d. After rewarming, dry gently and cover part with dry sterile dressing and elevate on pillow.

HYPERTENSIVE CRISIS

NOTE: Two of the most common presentations of Hypertensive Crisis are non-compliance with anti-hypertensive medication and recent Cocaine abuse.

NEVER treat hypertension in a suspected acute stroke patient.

CRITERIA:

1. SBP > 200
2. DBP > 130
3. Other signs and symptoms, including:
    a. Altered LOC
    b. Chest pain
    c. Confusion
    d. Headache
    e. Pulmonary Edema

EXCLUSION:

1. Suspected acute CVA
2. Patient < 18 years old
3. Eclampsia
4. Head injury

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**.
2. Continually assess patient for deterioration and need for airway control.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. IV NS KVO or saline lock
3. NITROGLYCERIN 0.4 mg SL; may repeat x1 in 5 minutes if no relief.
4. Continuously assess patient for deterioration and need for intubation.

---

5. Medical Control may consider additional NITROGLYCERIN 0.4 mg SL.

HYPERVENTILATION

NOTE: An oxygen mask should NEVER be placed on any patient without oxygen flowing.

CRITERIA:

1. Respiratory rate > 28 with sudden onset
2. Signs of hysteria or panic
3. Treatable causes ruled out (diabetes, drug overdose, asthma or COPD, CHF, tension pneumothorax)
4. Room air pulse oximetry > 94%

TREATMENT: ALL LEVELS

1. **INITIAL MEDICAL CARE**.
2. Assessment and History, to include:
    a. Evidence of trauma.
    b. JVD or pedal edema
    c. Auscultation of breath sounds
    d. Examination for retractions, pallor, cyanosis or acetone odor.
3. Document room air pulse oximetry.
4. Attempt to relax and reassure patient; loosen tight clothing; place patient in position of comfort.
5. Administer OXYGEN at 6 lpm by non-rebreather mask.

HYPOTHERMIC CARDIAC ARREST

NOTE: Pulses may be very weak or non-palpable in a severely hypothermic patient. Pulses should be assessed for one full minute to assure pulselessness. Unnecessary CPR could precipitate V-Fib.

Once CPR has been initiated on a hypothermic patient, it should be continued until patient regains adequate circulation, or patient is evaluated by a qualified Emergency Department physician.

CRITERIA:

1. Prolonged cold exposure
2. Pulseless, apneic patient

FR/BLS TREAMENT:

1. Begin CPR and apply AED. Follow CARDIOPULMONARY ARREST Protocol.
2. Defibrillation should be limited to a TOTAL of 3 attempts.
3. Manage airway per UNIVERSAL AIRWAY ALGORITHM.
4. Passive external warming:
    a. Remove patient to warm environment.
    b. Remove wet clothing.
    c. Cover patient with warm, dry blankets.
    d. Administer warmed, humidified OXYGEN as available.
    e. Increase ambient air temperature by increasing cabin heat.
5. Transport patient** in supine or Trendelenburg position (10 degrees).
6. Contact Medical Control.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. Follow appropriate dysrhythmia protocol.
    a. **Defibrillation and cardioversion should be limited to a total of 3 attempts.**
    b. **Administer EPINEPHRINE 1:10,000 1mg IV and a single dose of any applicable anti-dysrhythmic, if available.**
3. IV NS WO rate; use warm solution (102°-106°F) if available.

**** Only if transporting agency.**

NAUSEA/VOMITING

CRITERIA:

Any patient presenting with significant nausea/vomiting.

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**.

ILS TREATMENT:

1. Continue **FR/BLS TREATMENT.**
2. IV NS KVO or saline lock.
3. Administer ZOFRAN 4 mg IV or IM.

ORGANOPHOSPHATE POISONING

CRITERIA:

Suspected exposure to organophosphate compound

1. Signs and symptoms of exposure, including:
    a. Salivation
    b. Lacrimation
    c. Urination
    d. Diarrhea
    e. Gastrointestinal distress
    f. Emesis

FR/BLS TREATMENT:

1. Assure scene is safe and the patient has been decontaminated if needed.
2. **INITIAL MEDICAL CARE**.
3. Save all bottles, containers or labels for information. **DO NOT EXPOSE RESCUERS TO ORGANOPHOSPHATES.**

ILS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. Administer 20 ml/kg NS fluid bolus. May repeat fluid bolus as needed to maintain SBP 90-100 as long as lungs remain clear.
3. If seizures occur, refer to SEIZURE protocol.

POISONING AND OVERDOSE

CRITERIA:

1. Exposure to poisonous plant, food, chemical or pharmaceutical agent, including:
    a. Ingestion
    b. Inhalation
    c. Absorption through eyes, skin or mucous membranes
    d. Accidental or intentional injection
2. Signs and symptoms of overdose / poison exposure.

EXCLUSION:

Organophosphate exposure – see organophosphate poisoning protocol.

FR/BLS TREATMENT:

1. Assure scene is safe and the patient has been decontaminated if needed.
2. **INITIAL MEDICAL CARE**.
3. Save all bottles, containers and labels for information. **DO NOT EXPOSE**
4. **RESCUERS TO POISONOUS SUBSTANCES.**
5. If blood glucose < 60 mg/dl (or suspected) **and** patient is responsive with a good gag reflex, administer some form of ORAL GLUCOSE.
6. If **airway compromise** or **inadequate respiratory effort** present, administer intranasal NARCAN at 1 mg/ml per nostril via atomizer* (1 ml per nostril maximum; 2 mg total dose). May repeat in 2-3 minutes to a maximum dose of 4 mg, if no response.
7. Relay information to incoming ambulance.

ILS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. IV NS KVO or saline lock.
3. If **airway compromise** or **inadequate respiratory effort** present, administer NARCAN:
   IV or IM – 0.4 mg; may repeat every 2-3 minutes to a maximum dose of 4 mg, if no response.
   IN – 1 mg/ml per nostril via atomizer* (1 ml per nostril maximum; 2 mg total dose). May repeat in 2-3 minutes to a maximum dose of 4 mg if no response.
4. If blood glucose < 60 mg/dl, administer DEXTROSE 50% 25 g IV.
5. If no IV access available, administer GLUCAGON 1 mg IM.

***Intranasal medications must be administered through an atomizer; Maximum volume per nostril = 1 ml.**

SEIZURE/STATUS EPILEPTICUS

CRITERIA: (Any may be present)

1. Active seizure
2. Recurrent or prolonged seizures (status epilepticus)

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**.
2. Assessment; include neurological exam and past seizure history.
3. Immobilize cervical spine if indicated.
4. Position patient to prevent injury.
5. If blood glucose < 60 mg/dl (or suspected) **and** patient is conscious with an intact gag reflex, administer some form of ORAL GLUCOSE.

ILS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. IV NS KVO or saline lock.
3. If blood sugar < 60 mg/dl, administer DEXTROSE 50% 25 g IV.
4. If no IV access is available, administer GLUCAGON 1 mg IM.

SEPSIS

CRITERIA: (Must meet the following)

1. Age > 18 years
2. NOT Pregnant
3. History suggestive of infection or currently being treated for infection:
    a. Pneumonia (cough, shortness of breath)
    b. UTI (indwelling foley catheter, suprapubic catheter, etc)
    c. Abdominal Pain, Diarrhea
    d. Wound/Skin Infection
    e. Infected indwelling device (central line, port, etc)
    f. Recent Hospitalization and/or Surgery
    g. Immunocompromised
    h. Resident of Long Term Care Facility or Skilled Nursing Facility
4. At least TWO of the following criteria (new to patient):
    a. Temperature > 38°C (100.4°F) or < 36°C (96°F)
    b. Heart Rate > 90
    c. Respiratory Rate > 20
    d. Altered Mental Status
5. Hypoperfusion as manifested by ONE of the following:
    a. Manual SBP < 90; MAP < 65
    b. SpO2 < 90

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**
    a. Check blood glucose level. If blood glucose < 60 mg/dl refer to DIABETIC EMERGENCIES Protocol for treatment.
2. Administer OXYGEN at 15 lpm by non-rebreather mask
3. Reassess patient and vital signs every 5 minutes

ILS TREATMENT

1. Continue **FR/BLS TREATMENT**
2. Notify receiving hospital of **"SEPSIS ALERT"**
3. Consider 12-Lead EKG
4. Establish at least one large bore IV
    a. Administer 20ml/kg NS fluid bolus **(Document TOTAL amount of IVF given)**
        i. Reassess after each 250ml increment and STOP fluids if signs of pulmonary edema (increasing shortness of breath or rales/crackles on lung exam)
        ii. May repeat to maintain SBP > 90 or MAP > 65 as long as pulmonary edema is not suspected.
        iii. Total amount of IVF should not exceed 2000 mL
5. Continue to reassess patient including vital signs (manual BP), breath sounds, capnography (< 25 mmHg indicative of severe sepsis), cardiac monitor.

SHOCK (NOT FROM TRAUMA)

CRITERIA:

1. Signs and symptoms of shock, including:
    a. SBP < 90 or MAP < 65.
    b. Pale, cool and clammy skin
    c. Rapid, thready pulse
    d. Rapid or shallow breathing
2. Associated **MEDICAL** complaint, may include:
    a. Severe vomiting or diarrhea
    b. Dehydration
    c. GI bleeding
    d. Sepsis – Refer to SEPSIS Protocol

EXCLUSIONS:

1. Pregnancy
2. Pulmonary Edema

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**.
2. Keep patient warm and elevate feet.

ILS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. Administer 20 ml/kg NS fluid bolus. May repeat fluid bolus as needed to maintain SBP of 90-100 as long as lungs remain clear.
3. After 2 liters of NS have been administered consider switching to LR.

STROKE

NOTE: Do not treat hypertension in a patient with suspected acute stroke.

CRITERIA:

1. Signs or symptoms of acute stroke, including:
    a. Unilateral paralysis or paresthesia
    b. Unilateral pronator drift
    c. Unilateral facial droop
    d. Speech disturbances
    e. Monocular blindness
2. Acute onset of above signs/symptoms with previous medical history of:
    a. TIA
    b. CVA
    c. Hypertension
    d. Cardiac disease
    e. Sickle cell anemia

EXCLUSIONS:

1. Unresponsive
2. SBP < 90

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**.
2. Perform F.A.S.T. stroke screen.
3. If blood glucose < 60 mg/dl **and** patient is responsive with a good gag reflex, administer some form of ORAL GLUCOSE.

ILS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. IV NS KVO or saline lock.
3. If blood sugar < 60 mg/dl, administer DEXTROSE 50% 25 g IV.
4. If no IV access is available, administer GLUCAGON 1 mg IM.

F.A.S.T. Stroke Screen

Patient Name:	Age:	Date of Birth:

Information Obtained From:

❑ **Patient**

onset

❑ **Family:** _____

❑ **Other:** _____

Pertinent History/Symptoms:

❑ Fall/Head Trauma @ onset ❑ Seizure @

❑ Headache, Nausea/Vomiting, Neck Pain

❑ Patient taking Blood Thinner (i.e. Coumadin)

❑ Previous TIA/Stroke/Head Injury

Ambulatory prior to incident? ❑ Yes ❑ No Ambulatory at this time? ❑ Yes ❑ No

Screening Criteria:

(✓Check if **Abnormal)*

❑ F *(Face)*

Facial Droop: Have patient smile or show teeth. (Look for asymmetry)

❑ ***Normal:*** Both sides of the face move equally or not at all

❑ ****Abnormal:*** One side of the patient's face droops

❑ A *(Arm)*

Motor Weakness: Arm drift (Close eyes, extend arms, palms up)

❑ ***Normal:*** Remain extended equally, or drifts equally or does not move at all

❑ ****Abnormal:*** One arm drifts down when compared with the other

❑ S *(Speech)*

"You can't teach an old dog new tricks" (Repeat phrase)

❑ ***Normal:*** Phrase is repeated clearly and correctly

❑ ****Abnormal:*** Words are slurred (dysarthria) or abnormal (aphasia) or none

❑ T *(Time of onset)*

Last seen normal: **Time: _____ Date: _____**

Evaluation: Sp02: _____% RA Glucose: _____mg/dl Approx. weight: -_____

Vital Signs: BP _____ Pulse _____ Resp. _____ Cardiac Rhythm _____ ❑ A fib ❑ A flutter

If any *ONE* of the boxes (F, A, S) are checked, then the STROKE SCREEN is POSITIVE.
Notify Receiving Facility and Transport IMMEDIATELY.
Include TIME of ONSET in report

SYNCOPE

CRITERIA:

1. SBP > 90
2. Transient or near loss of consciousness with current normal LOC.

EXCLUSION:

1. SBP < 90
2. Other serious signs or symptoms, such as:
    a. Chest pain
    b. Respiratory difficulty
    c. Acute suspected CVA
3. Altered LOC
4. Seizure
5. Trauma
6. Heart rate <60 or >140

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE**.
2. If blood glucose < 60 mg/dl (or suspected) **and** patient is responsive with a good gag reflex, administer some form of ORAL GLUCOSE.

ILS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. Obtain 12-Lead EKG
    a. Transmit to Receiving Facility if abnormal (if available).
3. IV NS KVO or saline lock.
4. Monitor for dysrhythmias closely. If dysrhythmia present, follow appropriate dysrhythmia protocol.
5. If blood glucose < 60 mg/dl, administer DEXTROSE 50% 25 g IV.
6. If no IV access available, administer GLUCAGON 1 mg IM.
