

Santa Barbara County

PUBLIC Health



D E P A R T M E N T



**BLS, EMT OPTIONAL SCOPE, AND
ALS TREATMENT PROTOCOLS**

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**ANGELO SALVUCCI, MD
EMS MEDICAL DIRECTOR**

SANTA BARBARA COUNTY EMS BLS, EMT OPTIONAL SCOPE, AND ALS TREATMENT PROTOCOLS

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Santa Barbara County General Patient Guidelines

- I. Purpose: To establish a consistent approach to patient care
 - A. Initial response
 1. Review dispatch information with crew members and dispatch center as needed
 2. Consider other potential issues (location, time of day, weather, etc.)
 - B. Scene arrival and Size-up
 1. Address Body Substance Isolation/Personal Protection Equipment (BSI/PPE)
 2. Evaluate scene safety
 3. Determine the mechanism of injury (if applicable) or nature of illness
 4. Determine the number of patients
 5. Request additional help if necessary
 6. Consider spinal precautions (refer to Spinal Trauma Protocol)
 - C. Initial assessment
 1. Airway
 - a. Open airway as needed, maintaining inline cervical stabilization if trauma is suspected
 - b. Insert appropriate airway adjunct if indicated
 - c. Suction airway if indicated
 - d. If a partial or complete Foreign Body Airway Obstruction (FBAO) is present, utilize appropriate interventions
 2. Breathing
 - a. Assess rate, depth, and quality of respirations
 - b. Assess lung sounds
 - c. If respiratory effort inadequate, assist ventilations with BVM
 - d. Initiate airway management and oxygen therapy as indicated
 3. Circulation
 - a. Assess skin color, temperature, and condition
 - b. Check distal/central pulses, including capillary refill time
 - c. Control major bleeding
 - d. Initiate shock management as indicated
 4. Disability
 - a. Determine level of consciousness

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- b. Assess pupils
- c. Assess Circulation, Sensory, Motor (CSM)
- 5. Exposure
 - a. If indicated, remove clothing for proper assessment/treatment of injury location. Attempt to maintain patient dignity
 - b. Maintain patient body temperature at all times, utilize adjunct methods as needed.
- D. Determine Chief Complaint. Initiate treatment per Santa Barbara County policies/protocols
- II. History of Present Illness – including pertinent negatives and additional signs/symptoms
 - 1. Onset of current illness or chief complaint
 - 2. Provoking factors
 - 3. Quality
 - 4. Radiation
 - 5. Severity – 1 to 10 on pain scale (or pediatric pain scale)
 - 6. Time
- III. Vital Signs
 - 1. Blood Pressure in mmHg (at least one of which is auscultated) and Capillary Refill
 - 2. Heart Rate
 - 3. Respirations
 - 4. Pain – Use Numeric, FACES or FLACC scale as age appropriate
 - 5. ALS assessments shall include:
 - a. Cardiac rhythm
 - b. 12-lead ECG as indicated per Santa Barbara County Policy 539
 - c. Pulse Oximetry
 - d. Capnography (after advanced airway placement and CPAP placement)
 - e. *If documenting an abnormal v/s, repeat as appropriate and document action taken.*
- IV. Obtain history, including pertinent negatives
 - 1. HPI
 - 2. Past medical history



3. Medications
 4. Allergies
 5. Do not leave these areas blank in documentation; if information is not known or available, utilize an appropriate null data entry choice.
- V. Perform Trauma assessment as appropriate.

Rapid trauma survey

1. *Airway*
 - a. *Maintain inline cervical stabilization*
 - * *Follow spinal precautions per EMS Policy*
 - b. *Open airway as needed*
 - * *Utilize a trauma jaw thrust to maintain inline cervical stabilization if indicated*
 - c. *Suction airway if indicated*
2. *Breathing*
 - a. *Assess rate, depth and quality of respirations*
 - b. *If respiratory effort inadequate, assist ventilations with BVM*
 - c. *Insert appropriate airway adjunct if indicated*
 - d. *Assess lung sounds*
 - e. *Initiate airway management and oxygen therapy as indicated*
 - * *Maintain SpO₂ ≥ 95%*
3. *Circulation*
 - a. *Assess skin color, temperature, and condition*
 - b. *Check distal/central pulses and capillary refill time*
 - c. *Control major bleeding*
 - d. *Initiate shock management as indicated*
4. *Disability*
 - a. *Determine Glasgow Coma Scale - level of consciousness*
 - b. *Assess pupils*
5. *Exposure*
 - a. *If indicated, remove clothing for proper assessment/treatment of injury location.*
 - * *Maintain patient dignity*
 - b. *Maintain patient body temperature*



-
- VI. Base Hospital contact shall be made for all ALS patients in accordance with Santa Barbara County Policy 303
 - VII. Transport to appropriate facility per Santa Barbara County guidelines
 - 1. Transport and Destination Guidelines – Policy 622
 - 2. STEMI Receiving Center Standards – Policy 640
 - 3. Post VF/VT with ROSC – Policy 539
 - 4. Trauma Triage and Destination Criteria – Policy 510
 - 5. Hospital Diversion – Policy 620
 - VII. Continuously monitor vital signs and document all findings. Continue appropriate treatments and reassess throughout transport to assess for changes in patient status
 - IX. Documentation
 - 1. Completion of patient care documentation per Santa Barbara County Policy 701
 - 2. Document all assessment findings, pertinent negatives, vital signs (including a turnover of care set of vital signs), interventions/treatments (both initial and ongoing), responses to treatments, and all changes in patient status.
 - 3. Submit ECG strips for all ALS patients and all 12-lead ECG reports.
 - 4. Maintain patient confidentiality at all times.


A blue ink signature of Angelo Salvucci, MD, EMS Medical Director.



AIRWAY MANAGEMENT	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Open and position the airway • For foreign body airway obstruction: BLS choking Procedures • Airway adjuncts: OPA/NPA as needed to control airway • Oropharyngeal suctioning via tonsil-tip catheter • Oropharyngeal suctioning via tonsil-tip catheter • Oxygen via selected device <ul style="list-style-type: none"> ▪ Nasal Cannula 2-6 LPM ▪ Non-rebreather mask 10-15 LPM ▪ Bag-valve ventilations 8-10 breaths/min as needed. • For suspected spinal injuries, ventilate using in-line cervical stabilization 	<ul style="list-style-type: none"> • Open and position the airway • For foreign body airway obstruction: BLS choking Procedures • Airway adjuncts: OPA/NPA as needed to control airway • Oropharyngeal suctioning via tonsil-tip catheter • Oropharyngeal suctioning via tonsil-tip catheter • Oxygen via selected device <ul style="list-style-type: none"> ▪ Nasal Cannula 2-6 LPM ▪ Non-rebreather mask 10-15 LPM ▪ Bag-valve ventilations 12-20 breaths/min as needed (20-30 for infants.). • For suspected spinal injuries, ventilate using in-line cervical stabilization
Expanded Scope	
<ul style="list-style-type: none"> • King Airway / EMS approved emergency airway device is to be inserted if patient is <ul style="list-style-type: none"> ▪ unconscious, ▪ has no gag reflex, ▪ has RR<12, ▪ has no contraindications, ▪ AND airway/ventilation cannot be adequately managed using BVM. 	<ul style="list-style-type: none"> • King airway / EMS approved airway device only for patients >=4 feet tall
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • For foreign body airway obstruction refractory to BLS choking procedures, laryngoscopy to visualize and remove foreign body using Magill forceps. • Endotracheal intubation as needed to control the airway per Policy #532. • If unable to intubate after two attempts (of not more than 20 seconds each), or endotracheal intubation is otherwise contraindicated, or paramedic believes may be difficult or delayed, insert a King Airway. • Endotracheal tube suctioning with suction catheter (no more than 15 seconds per attempt) • Needle Thoracostomy procedure to be utilized only to relieve a <u>tension pneumothorax</u> per Policy #536. 	<ul style="list-style-type: none"> • Patient must be 12 years of age or greater for intubation. • For foreign body airway obstruction refractory to BLS choking procedures, laryngoscopy to visualize and remove foreign body using Magill forceps. • For patients aged 3 or greater with symptomatic tension pneumothorax; Needle Thoracostomy per Policy #536

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Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
<ul style="list-style-type: none"> • The following are signs and symptoms of tension pneumothorax may be present: <ul style="list-style-type: none"> ▪ altered or decreased BP ▪ increased HR and RR ▪ diminished breath sounds on affected side ▪ JVD ▪ increasing dyspnea or difficulty ventilating ▪ tracheal shift away from affected side (often difficult to assess.) 	<ul style="list-style-type: none"> • The following signs and symptoms of tension pneumothorax may be present: <ul style="list-style-type: none"> ▪ altered or decreased BP ▪ increased HR and RR ▪ diminished breath sounds on affected side ▪ JVD ▪ increasing dyspnea or difficulty ventilating ▪ tracheal shift away from affected side (often difficult to assess.)



PAIN CONTROL	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> Place patient in position of comfort Administer oxygen as indicated Assess pain using numeric pain scale 	<ul style="list-style-type: none"> Place patient in position of comfort Administer oxygen as indicated Assess pain using FACES or FLACC pain scale
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> IV access Morphine <ul style="list-style-type: none"> IV – 0.1mg/kg for moderate to severe pain <ul style="list-style-type: none"> May repeat q 5 min at half original dose Max 10 mg IM – 0.1 mg/kg <ul style="list-style-type: none"> Max 10 mg Recheck and document vital signs before and after each administration <ul style="list-style-type: none"> Hold if SBP < 100 mmHg If patient has significant injury to head, chest, abdomen or is hypotensive, <u>DO NOT administer pain control unless ordered by ED Physician</u> 	<ul style="list-style-type: none"> IV access Morphine – given for burns and isolated extremity injuries only <ul style="list-style-type: none"> IV – 0.1 mg/kg 0.1mg/kg for moderate to severe pain given over 1-2 minutes <ul style="list-style-type: none"> May repeat x 1 after 5 min at half original dose as needed for pain relief Max 0.2 mg/kg or 10 mg (whichever is lesser dose) IM – 0.1 mg/kg <ul style="list-style-type: none"> Max 10 mg Recheck and document vital signs before and after each administration <ul style="list-style-type: none"> Hold if SBP below age appropriate norm. If patient has significant injury to head, chest, abdomen or is hypotensive, <u>DO NOT administer pain control unless ordered by ED Physician</u>
Base Hospital Orders only	
<ul style="list-style-type: none"> If patient has significant injury to head, chest, abdomen or is hypotensive, DO NOT administer pain control unless ordered by ED Physician Consult with ED Physician for further treatment measures 	<ul style="list-style-type: none"> If patient has significant injury to head, chest, abdomen or is hypotensive, DO NOT administer pain control unless ordered by ED Physician For abdominal/flank pain by Base Hospital Physician order only: <ul style="list-style-type: none"> Morphine IV – 0.1 mg/kg 0.1mg/kg for moderate to severe pain given over 1-2 minutes Consult with ED Physician for further treatment measures
Communication Failure Protocol	
<p>If significant pain continues:</p> <ul style="list-style-type: none"> Morphine - IV – 0.1mg/kg over 1-2 min <ul style="list-style-type: none"> Max repeat dose of 10 mg <u>Max total dosage of 20 mg</u> IM – 0.1 mg/kg 	<p>If significant pain continues:</p> <ul style="list-style-type: none"> Morphine – <ul style="list-style-type: none"> IV – 0.1 mg/kg over 1-2 min <ul style="list-style-type: none"> May repeat x1 after 5 min at half original dose as needed for pain relief






<ul style="list-style-type: none">♦ Max repeat dose of 10 mg	<ul style="list-style-type: none">♦ Max 0.2 mg/kg or 10 mg (whichever is lesser dose)<ul style="list-style-type: none">▪ IM – 0.1 mg/kg♦ Max repeat dose of 10 mg
Additional Information	
<ul style="list-style-type: none">• Pain scale utilized in assessment should be documented before and after all treatments• May consider Ondansetron as prophylaxis per Nausea and Vomiting Protocol	<ul style="list-style-type: none">• Consider using FACES pain scale for the younger pediatric patient and document appropriately.• For patients 4 years and greater, may consider Ondansetron as prophylaxis per Nausea and Vomiting Protocol



VASCULAR ACCESS	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
NA	NA
Expanded Scope	
NA	NA
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • IV access is a Standing Order for all patients where an IV is indicated by protocol. • Peripheral IV placement is the preferred choice in all patients. • A saline lock is acceptable and may be utilized unless there is a specific need for running IV fluids. • Needle gauge selection should be determined by the situation and patient physiology (ie; adult cardiac arrest and major trauma should have large bore 16g/18g; elderly patients only requiring a saline lock may necessitate a 20g/22g. • External Jugular (EJ) IV placement is indicated in patients when no other peripheral IV can be established and the patient requires fluid administration or access for IV medications. Generally external jugular lines are used in unconscious patients but may be used in conscious patients with due regard for the patient's sensitivities. • Intraosseous Access (IO) is the preferred choice in unconscious patients when a peripheral IV cannot be established in no more than 2 attempts AND the patient requires immediate fluid administration or access for immediate medication administration. IO is contraindicated in conscious patients unless indicated in a specific treatment protocol. IO access must meet Policy 538 criteria. • If utilizing IO access on a conscious or semiconscious adult as indicated by specific protocol <ul style="list-style-type: none"> * Administer 40 mg of 2% preservative-free lidocaine slowly over 1-2 minutes prior to the initial 10ml normal saline bolus over 5 seconds. 	<ul style="list-style-type: none"> • Pediatric patients may necessitate a 20g or 22g Peripheral IV catheter based on size. • A saline lock is acceptable and may be utilized unless there is a specific need for running IV fluids • If intraosseous access is determined to be necessary, pediatric IO needle size (15mm) should be selected for all patients weighing 3 - 39kg. Manual IO method is required for any patient weighing less than 3 kg • Intraosseous Access (IO) is the preferred choice in unconscious patients when a peripheral IV cannot be established in no more than 2 attempts AND the patient requires immediate fluid administration or access for immediate medication administration. IO is contraindicated in conscious patients unless indicated in a specific treatment protocol. IO access must meet Policy 538 criteria. • 2% Lidocaine is NOT to be utilized for pediatric patients.
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A

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Additional Information

- All established sites must be monitored for infiltration and/or extravasation and discontinued as appropriate.

- All established sites must be monitored for infiltration and/or extravasation and discontinued as appropriate.
- Establishing vascular access on pediatric patients contributes to significantly increased patient stress levels. Paramedics should take this in to consideration prior to any prophylactic peripheral IV placement.

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ABDOMINAL/FLANK PAIN	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Position of Comfort • NPO • Monitor VS (check for orthostatic changes) • Airway management protocol as needed • Vital signs unstable (SBP < 90 or signs of poor perfusion): <ol style="list-style-type: none"> a. Place supine b. O2: 15 l/min by mask 	<ul style="list-style-type: none"> • Position of Comfort • NPO • Monitor VS (check for orthostatic changes) • Airway management protocol as needed • Vital signs unstable (SBP < 90 or signs of poor perfusion): <ol style="list-style-type: none"> a. Place supine b. O2: 15 l/min by mask
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • IV: NS TKO or saline lock • Infuse to keep SBP>100, re-evaluating after each 500 mL, MAX 1L. • For epigastric pain, consider performing a 12-lead ECG. • For nausea/vomiting refer to protocol • Morphine per Pain Control Protocol 	<ul style="list-style-type: none"> • Consider IV for hypotension – see “pediatric vital signs guidelines” Appendix A • For nausea/vomiting refer to protocol
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	<ul style="list-style-type: none"> • Morphine per Pain Control Protocol • Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
<ul style="list-style-type: none"> • Consider atypical presentation possible for acute coronary syndrome. 	

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Altered Neurologic Function	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • If suspected stroke, refer to Stroke Protocol (perform Cincinnati Stroke Scale) • Administer oxygen as indicated • If low blood sugar suspected <ul style="list-style-type: none"> ▪ Oral Glucose - PO – 15g 	<ul style="list-style-type: none"> • If suspected stroke, refer to Stroke Protocol (perform Cincinnati Stroke Scale) • Administer oxygen as indicated • If low blood sugar suspected <ul style="list-style-type: none"> ▪ Oral Glucose - PO – 15g
Expanded Scope	
<ul style="list-style-type: none"> • Determine Blood Glucose level <ul style="list-style-type: none"> ▪ BG<60, patient awake AND able to swallow safely; <ul style="list-style-type: none"> ♦ Oral Glucose - PO – 15 gm ▪ BG<60, patient unable to swallow safely <ul style="list-style-type: none"> ♦ Glucagon - IM – 1 mg • If Hx/PE suggests opioid overdose AND respirations less than 12/min: <ul style="list-style-type: none"> ▪ Narcan - IM – 2 mg 	<ul style="list-style-type: none"> • Determine Blood Glucose level <ul style="list-style-type: none"> ▪ BG<60, patient awake AND able to swallow safely; <ul style="list-style-type: none"> ♦ Oral Glucose - PO – 15 gm ▪ BG<60, patient unable to swallow safely <ul style="list-style-type: none"> ♦ Glucagon - IM – 0.1 mg/kg, max 1mg
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • IV access • Determine Blood Glucose level <ul style="list-style-type: none"> ▪ If < 60 and not able to swallow safely <ul style="list-style-type: none"> ♦ D10W <ul style="list-style-type: none"> • IV bolus – 25mg (250 mL) ♦ Glucagon (if no IV access) - IM – 1 mg ▪ Recheck Blood Glucose level 5 min after IV Dextrose bolus complete or 10 min after Glucagon administration <ul style="list-style-type: none"> ♦ If still < 60 <ul style="list-style-type: none"> • D10 - IV – 250 mL • If suspect opioid overdose AND respirations less than 12/min: <ul style="list-style-type: none"> ▪ Narcan - IM – 2 mg IN – 2 mg (1mg per nare) IV – 0.4mg q 1 min ♦ May repeat as needed to maintain respirations greater than 12/min . 	<ul style="list-style-type: none"> • Consider IV access • Determine Blood Glucose level <ul style="list-style-type: none"> ▪ If <60 <ul style="list-style-type: none"> ♦ D10W – <ul style="list-style-type: none"> • IV bolus –0.5G/kg (5mL/kg) • Maximum dose 25G (250mL) ♦ Glucagon (if no IV access) - IM – 0.1 mg/kg Max 1 mg ▪ Recheck Blood Glucose level 5 min after IV Dextrose bolus complete or 10 min after Glucagon administration: <ul style="list-style-type: none"> ♦ If still < 60 <ul style="list-style-type: none"> • D10W ♦ - IV bolus –0.5G/kg (5mL/kg) ♦ Maximum dose 25G (250mL) • If BG >60 and Resp Rate <12, <ul style="list-style-type: none"> • Narcan – IV/IM – 0.1mg/kg OR • Narcan IN – 0.1mg/kg (half of total dose per each nare) • If Hx/PE suggests opioid overdose AND respirations less than 12/min: <ul style="list-style-type: none"> ▪ Narcan - IM – 0.1 mg/kg IN - 0.1mg/kg (half of total dose per

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	<p>each nare) IV – 0.1mg/kg, max 0.4mg, q 1 min</p> <ul style="list-style-type: none"> ♦ May repeat as needed to maintain respirations greater than 12/min
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
<ul style="list-style-type: none"> • Certain oral hypoglycemic agents (e.g. - sulfonylureas) and long-acting insulin preparations have a long duration of action, sometimes up to 72 hours. Patients on these medications who would like to decline transport MUST be warned about the risk of repeat hypoglycemia for up to 3 days, which can occur during sleep and result in the patient's death. If the patient continues to decline further care, every effort must be made to have the patient speak to the ED Physician prior to leaving the scene. • If stroke is suspected refer to Stroke Protocol • If obvious sign opioid OD (e.g.; track marks, bystander history, drug paraphernalia) give naloxone 2mg IM or IN, observe for 3 minutes and if RR>12 no IV necessary. • IO for access ONLY if patient meets IO Policy 538 criteria 	<ul style="list-style-type: none"> • IO for access ONLY if patient meets IO Policy 538 criteria

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ANAPHYLAXIS / ALLERGIC REACTION	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> Assist with prescribed Epi-Pen Administer oxygen as indicated 	<ul style="list-style-type: none"> Assist with prescribed Epi-Pen Administer oxygen as indicated
Expanded Scope	
<ul style="list-style-type: none"> If Wheezing is present <ul style="list-style-type: none"> Albuterol - Nebulizer – 5 mg/6 mL Repeat as needed Epinephrine 1:1,000 – IM 0.3 mg May repeat x 2 	<ul style="list-style-type: none"> If Wheezing is present <ul style="list-style-type: none"> Albuterol <ul style="list-style-type: none"> Less than 2 years old <ul style="list-style-type: none"> Nebulizer – 2.5 mg/3 mL Repeat as needed 2 years old and greater <ul style="list-style-type: none"> Nebulizer – 5 mg/6 mL Repeat as needed Epinephrine 1:1,000 – IM 0.15 mg May repeat x 1
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> Allergic Reaction or Dystonic Reaction <ul style="list-style-type: none"> Benadryl - IV/IM – 50 mg If Wheezing is present <ul style="list-style-type: none"> Albuterol <ul style="list-style-type: none"> Nebulizer – 5mg/6ml Repeat as needed Anaphylaxis without Shock <ul style="list-style-type: none"> Epinephrine 1:1,000 IM <ul style="list-style-type: none"> Less than 40 years old – 0.5 mg Every 5 minutes May repeat x2 if not improving 40 years old and greater – 0.3 mg Every 5 minutes May repeat x2 if not improving Only if severe respiratory distress is present <ul style="list-style-type: none"> IV access Benadryl - IV/IM – 50 mg May repeat x 1 in 10 min Anaphylaxis with Shock <ul style="list-style-type: none"> Treatment as above for Anaphylaxis without Shock Initiate 2nd IV Normal Saline - IV bolus – 1 Liter For Profound Hypotension <ul style="list-style-type: none"> Epinephrine 1:10,000 Slow IO/IVP – 0.1 mg (1 mL) increments 	<ul style="list-style-type: none"> Allergic Reaction or Dystonic Reaction <ul style="list-style-type: none"> Benadryl - IV/IM – 1mg/kg (Max 50mg) If Wheezing is present <ul style="list-style-type: none"> Albuterol <ul style="list-style-type: none"> Less than 2 years old <ul style="list-style-type: none"> Nebulizer – 2.5mg/3ml Repeat as needed 2 years old and greater <ul style="list-style-type: none"> Nebulizer – 5mg/6ml Repeat as needed Anaphylaxis without Shock <ul style="list-style-type: none"> Epinephrine 1:1,000 IM – 0.01 mg/kg Max 0.3 mg IV access Benadryl - IV/IM – 1 mg/kg May repeat x 1 in 10 min Max 50 mg Anaphylaxis with Shock <ul style="list-style-type: none"> Treatment as above for Anaphylaxis without Shock Initiate 2nd IV if possible or establish IO Normal Saline - IV/IO bolus – 20 mL/kg For Profound Hypotension <ul style="list-style-type: none"> Epinephrine 1:10,000 Slow IO/IVP – 0.01 mg/kg (0.1 mL/kg) increments Max 0.3 mg (3 mL) over 1-2 min

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Max 0.3 mg (3 mL) over 1-2 min	
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
<ul style="list-style-type: none">• Anaphylaxis without Shock<ul style="list-style-type: none">▪ Repeat Epinephrine <u>1:1,000</u> IM – 0.3 mg q 5 min x 2 as needed• Anaphylaxis with Shock<ul style="list-style-type: none">▪ For continued shock<ul style="list-style-type: none">♦ Repeat Normal Saline - IV bolus – 1 Liter♦ Repeat Epinephrine <u>1:1,000</u> - IM – 0.3 mg q 5 min x 2 as needed	<ul style="list-style-type: none">• Anaphylaxis without Shock<ul style="list-style-type: none">▪ Repeat Epinephrine <u>1:1,000</u> IM – 0.01 mg/kg q 5 min x 2 as needed• Anaphylaxis with Shock<ul style="list-style-type: none">▪ For continued shock<ul style="list-style-type: none">♦ Repeat Normal Saline - IV/IO bolus – 20 mL/kg♦ Repeat Epinephrine <u>1:1,000</u> - IM – 0.01 mg/kg q 5 min x 2 as needed
Additional Information	
• Mild reaction of hives only does not require treatment.	• Mild reaction of hives only does not require treatment.

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BEHAVIORAL EMERGENCIES	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Attempt to establish rapport. • Airway management protocol as needed. • If patient appears stable, and emergency treatment is unnecessary, reassure while transporting, and do not attempt vital signs or any other procedures. • Try not to violate the patient's personal space. 	<ul style="list-style-type: none"> • Attempt to establish rapport. • Airway management protocol as needed. • If patient appears stable, and emergency treatment is unnecessary, reassure while transporting, and do not attempt vital signs or any other procedures. • Try not to violate the patient's personal space.
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • IV Access • Determine blood glucose level • For Extreme Agitation <ul style="list-style-type: none"> ▪ Midazolam - IV – 2 mg Repeat 1 mg q 2 min as needed Max 10 mg IM – 0.1 mg/kg Max 10 mg • Any patient receiving Midazolam will be placed on a cardiac monitor. 	<ul style="list-style-type: none"> • Determine blood glucose level • For Extreme Agitation <ul style="list-style-type: none"> ▪ Midazolam - IM – 0.1 mg/kg Max 5 mg Any patient receiving Midazolam will be placed on a cardiac monitor.
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
<ul style="list-style-type: none"> • If patient refuses care and transport, and that refusal is because of “mental disorder”, consider having patient taken into custody according to Welfare and Institutions Code Section 5150. “Mental disorders” do not generally include alcohol or drug intoxication, brain injury, hypoxemia, hypoglycemia, or similar causes. • Be sure to consider and rule out other possible causes or behavior (traumatic or medical). 	<ul style="list-style-type: none"> • If patient refuses care and transport, and that refusal is because of “mental disorder”, consider having patient taken into custody according to Welfare and Institutions Code Section 5150. “Mental disorders” do not generally include alcohol or drug intoxication, brain injury, hypoxemia, hypoglycemia, or similar causes. • Be sure to consider and rule out other possible causes or behavior (traumatic or medical).

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<ul style="list-style-type: none">• Use of restraints (physical or chemical) shall be documented and monitored.• Welfare and Institutions Code Section 5150:<ul style="list-style-type: none">▪ A patient may be taken into custody if, as a result of a mental disorder, there is a danger to self and others or is gravely disabled. A California peace officer, a California licensed psychiatrist in an approved facility, Santa Barbara County Health Officer or other County-designated individuals, can take the individual into custody, but it must be enforced by the police in the field.• Patients shall be medically cleared prior to transporting to a psychiatric facility if patient is placed on 5150 hold by law enforcement.• All patients that are deemed medically unstable shall be transported to the most accessible Emergency Department.	<ul style="list-style-type: none">• Use of restraints (physical or chemical) shall be documented and monitored.• Welfare and Institutions Code Section 5150:<ul style="list-style-type: none">▪ A patient may be taken into custody if, as a result of a mental disorder, there is a danger to self and others or is gravely disabled. A California peace officer, a California licensed psychiatrist in an approved facility, Santa Barbara County Health Officer or other County-designated individuals, can take the individual into custody, but it must be enforced by the police in the field.• Patients shall be medically cleared prior to transporting to a psychiatric facility if patient is placed on 5150 hold by law enforcement.• All patients that are deemed medically unstable shall be transported to the most accessible Emergency Department.
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CARDIAC ARREST	
VF / VT	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • If collapse before dispatch, begin CAM. AED shall be attached during compressions then press analyze and follow prompts. • If shock indicated, perform 30 compressions while AED charges then deliver shock, followed by immediate CPR • If witnessed, immediately attach AED while performing chest compressions via CAM • Airway management per Airway Management Protocol and SB County EMS policy 	<ul style="list-style-type: none"> • If collapse before dispatch, begin compression AND ventilation CPR, and attach AED) • If witnessed, immediately attach AED while performing compressions • Airway management per SB County EMS policy
Expanded Scope	
<ul style="list-style-type: none"> • Same as BLS 	<ul style="list-style-type: none"> • Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • Defibrillate <ul style="list-style-type: none"> ▪ Use the energy settings recommended by the monitor manufacturer that have been approved by service provider medical director. ▪ Charge during compressions ▪ Delays in compressions not to exceed 3 seconds ▪ Repeat every 2 minutes as indicated • IV or IO access (consider immediate IO access if IV access not readily accessible) <ul style="list-style-type: none"> ▪ Epinephrine <ul style="list-style-type: none"> ◆ IV/IO – 1:10,000: 1 mg (10 mL) q 3-5 min ▪ Lidocaine <ul style="list-style-type: none"> ◆ IV/IO – 1.5 mg/kg q 3-5 min Max 3 mg/kg • ALS Airway Management <ul style="list-style-type: none"> ▪ If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures ▪ Maintain BLS airway if feasible until ROSC in achieved. • If VF/VT converts and then recurs; <ul style="list-style-type: none"> ▪ Defibrillate at last successful energy level • If sustained ROSC (>30 seconds), perform 12-lead EKG and transport patient to closest SRC and initiate therapeutic hypothermia treatment. 	<ul style="list-style-type: none"> • Defibrillate – 2 Joules/kg <ul style="list-style-type: none"> ▪ If patient still in VF/VT at rhythm check, increase to 4 Joules/kg ▪ Repeat every 2 minutes as indicated • IV or IO access (consider immediate IO access if IV access not readily accessible) <ul style="list-style-type: none"> ▪ Epinephrine 1:10,000 <ul style="list-style-type: none"> ◆ IV/IO – 0.01mg/kg (0.1 mL/kg) q 3-5 min ▪ Lidocaine – Every 3-5 min <ul style="list-style-type: none"> ◆ IV/IO – 1 mg/kg Max 3 mg/kg • ALS Airway Management <ul style="list-style-type: none"> ▪ If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures

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<ul style="list-style-type: none"> • Suspected origin of Tricyclic Antidepressant Overdose: <ul style="list-style-type: none"> ▪ Sodium Bicarbonate <ul style="list-style-type: none"> ◆ IV/IO – 1 mEq/kg Repeat 0.5 mEq/kg q 5 min 	
Base Hospital Orders only	
<ul style="list-style-type: none"> • Patient with repeated firing of AICD: <ul style="list-style-type: none"> ▪ Lidocaine <ul style="list-style-type: none"> ◆ IV/IO - 1mg/kg • Torsades de Pointes <ul style="list-style-type: none"> ▪ Magnesium Sulfate <ul style="list-style-type: none"> ◆ IV/IO – 2 gm over 2 min May repeat x 1 in 5 min • After 20 full minutes of resuscitation with continued VF refractory to treatment, contact Base Hospital for treatment and transport options and to consider Determination of Death order. 	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
<ul style="list-style-type: none"> • Metronome shall be set at 110 compressions per minute: <ul style="list-style-type: none"> 10:1 synchronized compressions/ventilations • If patient is hypothermic – only ONE round of medication administration and limit defibrillation to 6 times prior to Base Hospital contact. Field determination of death is discouraged in these patients and they should be transported to the most accessible receiving facility • Ventricular tachycardia (VT) is a rate > 150 bpm <ul style="list-style-type: none"> ▪ IO to be used when unable to establish an IV after 2 attempts or 90 seconds. ▪ CPR is not to be interrupted during IV/IO or intubation attempts or medication administration. ▪ Blood glucose measurements are not accurate and D50 and naloxone are not helpful, so none are done for any patient in cardiac arrest. Blood glucose may be done if ROSC is achieved. • Modifications for Pregnancy <ul style="list-style-type: none"> ▪ <u>Circulation</u> <ul style="list-style-type: none"> ◆ Higher hand placement on chest wall ◆ Perform uterine displacement (manual, backboard, pillows) to allow effective compressions ◆ AED same as with non-pregnant patient 	<ul style="list-style-type: none"> • All pediatric resuscitation patients are to be transported to the closest receiving hospital.

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| <ul style="list-style-type: none">▪ <u>Airway</u><ul style="list-style-type: none">◆ May need jaw-thrust to open airway◆ Consider early advanced airway◆ Use smaller ET tube than normal (0.5-1 mm smaller)◆ Provide cricoid pressure when intubating▪ <u>Breathing</u><ul style="list-style-type: none">◆ Expect increased resistance to bag/mask ventilation◆ Increase rate of respirations from 10-12 to 16-18 breaths/minute | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

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CARDIAC ARREST -	
ASYSTOLE / PULSELESS ELECTRICAL ACTIVITY (PEA)	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • If collapse before dispatch, begin CAM. AED shall be attached during compressions, then press “analyze” and follow prompts. • If witnessed, immediately attach AED while performing chest compressions via CAM • Airway management per Airway Management Protocol and SB County EMS policy. • Deliver 300ml of oxygen Q 10th compression on upstroke – 200 from recoil and 100 from PPV 	<ul style="list-style-type: none"> • If collapse before dispatch, compressions AND ventilation CPR, attaching AED without interruptions in compressions • If witnessed, immediately attach AED • Airway management per Airway Management Protocol and SB County EMS policy
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • Assess/treat causes • Defibrillator shall be charged during compressions and charge dumped if Asystole/PEA. • Confirm Asystole by increasing gain to 2.0. If found to be fine VF, deliver shock • IV/IO access (consider immediate IO access if IV access not readily visible) <ul style="list-style-type: none"> ▪ Epinephrine <ul style="list-style-type: none"> ♦ IV/IO – 1:10,000: 1 mg (10 mL) q 3-5 min If suspected hypovolemia: ▪ Normal Saline <ul style="list-style-type: none"> ♦ IV/IO bolus – 1 Liter • ALS Airway Management • If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures • If Asystole converts to organized rhythm but is <40 and/or ETCO₂ <20, continue compressions for 2 minutes then reassess. • If ROSC is achieved, establish appropriate advanced airway • Tricyclic Antidepressant Overdose <ul style="list-style-type: none"> ▪ Sodium Bicarbonate <ul style="list-style-type: none"> ♦ IV/IO – 1 mEq/kg/ Repeat 0.5 mEq/kg q 5 min 	<ul style="list-style-type: none"> • Assess/treat causes • IV/IO access (consider IO access if IV access not readily visible) <ul style="list-style-type: none"> ▪ Epinephrine 1:10,000 <ul style="list-style-type: none"> ♦ IV/IO – 0.01mg/kg (0.1 mL/kg) q 3-5 min If suspected hypovolemia: ▪ Normal Saline <ul style="list-style-type: none"> ♦ IV/IO bolus – 20 mL/kg Repeat x 2 • Make early Base Hospital contact for all pediatric cardiac arrests

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<p>Paramedics shall not interfere with the Triangle of Life All ALS procedures shall be performed with ongoing compressions</p>	
Base Hospital Orders only	
<ul style="list-style-type: none"> • Beta Blocker Overdose <ul style="list-style-type: none"> ▪ Glucagon <ul style="list-style-type: none"> ♦ IV/IO – 2 mg May give up to 10mg if available • Calcium Channel Blocker Overdose <ul style="list-style-type: none"> ▪ Calcium Chloride <ul style="list-style-type: none"> ♦ IV/IO – 1 gm Repeat x 1 in 10 min ▪ Glucagon <ul style="list-style-type: none"> ♦ IV/IO – 2 mg May give up to 10mg if available • History of Renal Failure/Dialysis <ul style="list-style-type: none"> ▪ Sodium Bicarbonate <ul style="list-style-type: none"> ♦ IV/IO – 1 mEq/kg Repeat 0.5 mEq/kg q 5 min 	<ul style="list-style-type: none"> • Tricyclic Antidepressant Overdose <ul style="list-style-type: none"> ▪ Sodium Bicarbonate <ul style="list-style-type: none"> ♦ IV/IO – 1 mEq/kg Repeat 0.5 mEq/kg q 5 min • Beta Blocker Overdose <ul style="list-style-type: none"> ▪ Glucagon <ul style="list-style-type: none"> ♦ IV/IO – 0.1 mg/kg May give up to 10mg if available • Calcium Channel Blocker Overdose <ul style="list-style-type: none"> ▪ Calcium Chloride <ul style="list-style-type: none"> ♦ IV/IO – 20 mg/kg Repeat x 1 in 10 min ▪ Glucagon <ul style="list-style-type: none"> ♦ IV/IO – 0.1 mg/kg May give up to 10mg if available • History of Renal Failure/Dialysis <ul style="list-style-type: none"> ▪ Sodium Bicarbonate <ul style="list-style-type: none"> ♦ IV/IO – 1 mEq/kg Repeat 0.5 mEq/kg q 5 min ▪ Calcium Chloride <ul style="list-style-type: none"> ♦ IV/IO – 20 mg/kg Repeat x 1 in 10 min
<p>Consult with ED Physician for further treatment measures</p>	<p>Consult with ED Physician for further treatment measures</p>
Communication Failure Protocol	
<p>N/A</p>	<p>N/A</p>
Additional Information	
<ul style="list-style-type: none"> • Metronome shall be set at 110cpm • If sustained ROSC (> 30 seconds), perform 12-lead EKG. Transport to the appropriate SRC • Blood glucose measurements are not accurate and D50 and naloxone are not helpful, so none are done for any patient in cardiac arrest. Blood glucose may be done if ROSC is achieved. • If suspected hypovolemia, initiate immediate transport • In cases of normothermic cardiac arrest patients 18 years and older with unwitnessed cardiac arrest, adequate ventilations, vascular access, and persistent asystole or PEA, confirmed in 2 leads, after 20 full minutes of standard advanced life support care, the paramedic may make a field Determination of Death per Policy #509 • If patient is hypothermic – only ONE round of medication administration prior to Base Hospital contact. Field determination of death is discouraged in 	<ul style="list-style-type: none"> • If patient is hypothermic – only ONE round of medication administration prior to Base Hospital contact. • All pediatric resuscitation patients are to be transported to the closest receiving facility.

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these patients and they should be transported to the most accessible receiving facility.

• **Modifications for Pregnancy**

- Circulation
 - ◆ Higher hand placement on chest wall
 - ◆ Perform uterine displacement (manual, backboard, pillows) to allow effective compressions
 - ◆ AED same as with non-pregnant patient
- Airway
 - ◆ May need jaw-thrust to open airway
 - ◆ Consider early advanced airway
 - ◆ Use smaller ET tube than normal (0.5-1 mm smaller)
 - ◆ Provide cricoid pressure when intubating
- Breathing
 - ◆ Expect increased resistance to bag/mask ventilation
 - ◆ Increase rate of respirations from 10-12 to 16-18 breaths/minute

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CHEST PAIN – ACUTE CORONARY SYNDROME

ADULT

BLS Procedures

- Administer oxygen if dyspnea, signs of heart failure or shock, or SAO₂ < 94%
- Assist patient with prescribed Nitroglycerin as needed for chest pain
 - Hold if SBP < 100 mmHg

Expanded Scope

- NTG 0.4mg SL (spray or tabs) Q5 min until pain resolved.
 - Hold NTG if SBP <100

ALS Prior to Base Hospital Contact

- Perform 12-lead ECG (prior to medication administration if possible)
 - If “MEETS ST ELEVATION MI CRITERIA” or “****ACUTE MI SUSPECTED****” is present, expedite transport to closest STEMI Receiving Center
- Document all initial and ongoing rhythm strips and ECG changes
- For continuous chest pain consistent with acute coronary syndrome:
 - Nitroglycerin
 - ♦ SL or lingual spray – 0.4 mg q 5 min for continued pain
 - No max dosage
 - Maintain SBP > 100 mmHg
 - ♦ If normal SBP < 100 mmHg, then maintain SBP > 90 mmHg
 - Aspirin
 - ♦ PO – 324 mg
- IV access
 - 2 attempts only prior to Base Hospital contact
- If pain persists and not relieved by NTG:
 - ♦ Morphine – per protocol - Pain Control
 - Maintain SBP > 100 mmHg
- If patient presents or becomes hypotensive:
 - Elevate legs
 - Normal Saline
 - ♦ IV bolus – 250 mL
 - Unless CHF is present

Base Hospital Orders only

- Ventricular Ectopy – PVC's > 10/min, multifocal PVC's, or unsustained V-Tach
 - Lidocaine
 - ♦ IV – 1 mg/kg
 - May repeat 0.5 mg/kg slow IVP q 5-10 min
 - for continued ectopy
 - Max 3 mg/kg
- If hypotensive and signs of CHF are present or no response to fluid therapy:
 - Dopamine – IVPB - 10mcg/kg/min

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Consult with ED Physician for further treatment measures

Communication Failure Protocol

N/A

Additional Information

- Nitroglycerin is contraindicated when erectile dysfunction medications (Viagra, Levitra, and Cialis) have been recently used (Viagra or Levitra within 24 hours; Cialis within 48 hours). NTG then may only be given by ED Physician order

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Symptomatic Bradycardia	
ADULT (HR < 45 BPM)	PEDIATRIC – (14 years and under) (HR < 60 BPM)
BLS Procedures	
<ul style="list-style-type: none"> • Administer oxygen as indicated • Shock position as tolerated 	<ul style="list-style-type: none"> • Administer oxygen as indicated • Assist ventilations if needed <ul style="list-style-type: none"> ▪ If significant ALOC, initiate CPR
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • IV access <ul style="list-style-type: none"> ▪ Atropine <ul style="list-style-type: none"> ♦ IV – 0.5 mg (1 mg/10 mL) • Transcutaneous Pacing (TCP) <ul style="list-style-type: none"> ▪ Should be initiated only if patient has signs of hypoperfusion ▪ If pain is present during TCP <ul style="list-style-type: none"> ♦ Morphine – per protocol – “Pain Control” • If symptoms persist for 3 minutes after first atropine dose and if no capture with TCP: <ul style="list-style-type: none"> ▪ Atropine <ul style="list-style-type: none"> ♦ IV – 0.5 mg q 3-5 min Max 0.04 mg/kg 	<ul style="list-style-type: none"> • IV access <ul style="list-style-type: none"> ▪ IO access only if pt in extremis <ul style="list-style-type: none"> ♦ Epinephrine 1:10,000 ▪ IV/IO – 0.01 mg/kg (0.1 mL/kg) q 3-5 min
Base Hospital Orders only	
<ul style="list-style-type: none"> • If symptoms persist for 3 minutes after first atropine dose and if no capture with TCP: <ul style="list-style-type: none"> ▪ Dopamine <ul style="list-style-type: none"> ♦ IVPB – 10 mcg/kg/min (Use if patient continues to be unresponsive to atropine and TCP) • For suspected hyperkalemia <ul style="list-style-type: none"> ▪ Calcium Chloride <ul style="list-style-type: none"> ♦ IV – 1 gm over 1 min ♦ Withhold if suspected digitalis toxicity ▪ Sodium Bicarbonate <ul style="list-style-type: none"> ♦ IV – 1 mEq/kg 	<ul style="list-style-type: none"> ▪ Atropine <ul style="list-style-type: none"> ♦ IV/IO – 0.02 mg/kg Minimum dose – 0.1 mg Maximum single dose 0.5mg
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures

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Communication Failure Protocol	
<ul style="list-style-type: none">• If symptoms persist for 3 minutes after first atropine dose and if no capture with TCP<ul style="list-style-type: none">▪ Atropine<ul style="list-style-type: none">♦ IV – 0.5 mg q 3-5 min Max 0.04 mg/kg▪ Dopamine<ul style="list-style-type: none">♦ IVPB – 10 mcg/kg/min Use if patient continues to be unresponsive to atropine and TCP	
Additional Information	
N/A	N/A

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Supraventricular Tachycardia	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> Administer oxygen as indicated 	<ul style="list-style-type: none"> Administer oxygen as indicated
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> Valsalva maneuver IV Access Stable – Mild to moderate chest pain/SOB <ul style="list-style-type: none"> Valsalva maneuver Adenosine – ONLY FOR REGULAR NARROW COMPLEX TACHYCARDIAS <ul style="list-style-type: none"> IV – 6 mg rapid push immediately followed by 10-20 mL NS flush No conversion or rate control from first Adenosine dose: Adenosine <ul style="list-style-type: none"> IV – 12 mg rapid push immediately followed by 10-20 mL NS flush May repeat x 1 if no conversion or rate control BH contact for further direction. Unstable – ALOC, signs of shock or CHF, severe CP <ul style="list-style-type: none"> Place on backboard and prepare for synchronized cardioversion Midazolam <ul style="list-style-type: none"> IV – 2 mg Should only be given if it does not result in delay of synchronized cardioversion Synchronized Cardioversion <ul style="list-style-type: none"> For those utilizing Lifepak 15 monitors, utilize manufacturers recommendations as follows: <ul style="list-style-type: none"> settings for narrow complex, reg tachycardia (SVT) and for atrial flutter utilize start and increase in stepwise fashion from 50J, 100J, 200J, 300J, 360J. If utilizing other monitoring equipment, use the biphasic energy settings that have been approved by service provider medical director 	<ul style="list-style-type: none"> Unstable – ALOC, signs of shock or CHF: <ul style="list-style-type: none"> Place on backboard and prepare for synchronized cardioversion Contact Base Hospital

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Base Hospital Orders only	
	<ul style="list-style-type: none">• Cardioversion per PALS guidelines.<ul style="list-style-type: none">▪ 0.5 J/kg▪ (may increase to 2 J/kg if initial dose ineffective)
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
<ul style="list-style-type: none">• Adenosine is contraindicated in pt with 2° or 3rd° AV Block, Sick Sinus Syndrome (except in pt with functioning pacemaker), or known hypersensitivity to adenosine• Unless the patient is in moderate or severe distress, consider IV access and transport only. Consider withholding adenosine administration if patient is stable until ED Physician evaluation• Document all ECG strips during adenosine administration and/or synchronized cardioversion	

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WIDE COMPLEX TACHYCARDIA – NOT IN ARREST	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
• Administer oxygen as indicated	• Administer oxygen as indicated
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • IV Access • Stable – Mild to moderate chest pain/SOB <ul style="list-style-type: none"> ▪ Lidocaine <ul style="list-style-type: none"> ♦ IV – 1 mg/kg Rate of 50 mg/min • Unstable – ALOC, signs of shock or CHF <ul style="list-style-type: none"> ▪ Midazolam <ul style="list-style-type: none"> ♦ IV – 2 mg Should only be given if it does not result in delay of synchronized cardioversion • Synchronized Cardioversion <ul style="list-style-type: none"> ▪ Use standard energy of 100J, 200J, 300J, 360J applies for unstable V-tach with a pulse. ▪ OR energy settings recommended by monitor manufacturer and approved by service provider medical director ▪ If patient needs sedation and there is a delay in obtaining sedation medication: <ul style="list-style-type: none"> ♦ Lidocaine IV – 1 mg/kg Rate of 50 mg/min • Unstable polymorphic (irregular) VT: <ul style="list-style-type: none"> ▪ Defibrillation Use the biphasic energy settings that have been approved by service provider medical director. 	<ul style="list-style-type: none"> • IV Access • Stable – Mild to moderate chest pain/SOB <ul style="list-style-type: none"> ▪ Lidocaine <ul style="list-style-type: none"> ♦ IV – 1 mg/kg ▪ Contact Base Hospital • Unstable – ALOC, signs of shock or CHF <ul style="list-style-type: none"> ▪ Place on backboard and prepare for synchronized Cardioversion ▪ Contact Base Hospital
Base Hospital Orders only	
<ul style="list-style-type: none"> • Torsades de Pointes <ul style="list-style-type: none"> ▪ Magnesium Sulfate <ul style="list-style-type: none"> ♦ IVPB – 2 gm in 50 mL D5W infused over 5 min May repeat x 1 if Torsades continues or recurs 	<ul style="list-style-type: none"> • Cardioversion per PALS guidelines <ul style="list-style-type: none"> ▪ 0.5 J/kg ▪ (may increase to 2 J/kg if initial dose ineffective) • Consult with ED Physician for further treatment measures

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Communication Failure Protocol

- Stable/Unstable:
 - Repeat Lidocaine
 - ◆ IV – 0.5 mg/kg q 5-10 min
Max 3 mg/kg
- Hold if decreased cardiac output, significant liver dysfunction, or in patient > 70 years of age

Additional Information

- Early base hospital contact is recommended in unusual circumstances, e.g. Torsades de Pointes, Tricyclic OD and renal failure.
- Ventricular tachycardia (VT) is a rate > 150 bpm

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NAUSEA and VOMITING	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> Maintain airway and position of comfort Administer oxygen as indicated. 	<ul style="list-style-type: none"> Maintain airway and position of comfort. Administer oxygen as indicated.
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> Any patient receiving Ondansetron MUST be placed on a cardiac monitor throughout care. If moderate to severe nausea or vomiting is present or there is a potential for airway compromise (secondary to suspected/actual head injury): <ul style="list-style-type: none"> IV access <ul style="list-style-type: none"> NS 1L IV Ondansetron <ul style="list-style-type: none"> PO – 4 mg ODT May repeat x 1 in 10 min IV/IM – 4 mg May repeat x 1 in 10 min May consider as prophylaxis prior to Morphine administration: <ul style="list-style-type: none"> PO – 4mg ODT x1 OR IV/IM – 4mg x1 	<ul style="list-style-type: none"> Any patient receiving Ondansetron MUST be placed on a cardiac monitor throughout care. If moderate to severe nausea or vomiting is present or there is a potential for airway compromise (secondary to suspected/actual head injury): <ul style="list-style-type: none"> IV access <ul style="list-style-type: none"> NS 20mL/kg IV x1 May repeat x1 prior to BH contact Ondansetron – 4 years old and greater <ul style="list-style-type: none"> PO – 4 mg ODT IV/IM – 4 mg
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
Ondansetron is contraindicated if patient has a known prolonged Q-T interval.	



POISONING / OVERDOSE	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Decontaminate if indicated and appropriate • Administer oxygen as indicated 	<ul style="list-style-type: none"> • Decontaminate if indicated and appropriate • Administer oxygen as indicated
Expanded Scope	
<ul style="list-style-type: none"> • Same as BLS and: • Suspected opiate overdose with respirations less than 12/min: <ul style="list-style-type: none"> ▪ Narcan <ul style="list-style-type: none"> ♦ IM – 2 mg May repeat as needed to maintain respirations greater than 12/min 	<ul style="list-style-type: none"> • Same as BLS and • Suspected opiate overdose with respirations less than 12/min: <ul style="list-style-type: none"> ▪ Narcan <ul style="list-style-type: none"> ♦ IM – 0.1 mg/kg Initial max 2 mg May repeat as needed to maintain respirations greater than 12/min
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • IV access • Oral ingestion within 1 hour, awake and gag reflex present: <ul style="list-style-type: none"> ▪ Activated Charcoal <ul style="list-style-type: none"> ♦ PO – 1 gm/kg Max 50 gm • Suspected opiate overdose with respirations less than 12/min: <ul style="list-style-type: none"> ▪ Narcan <ul style="list-style-type: none"> ♦ IN – 2mg (1mg per nostril) via MAD ♦ IM – 2 mg ♦ IV – 0.4 mg q 1 min Initial max 2 mg May repeat as needed to maintain respirations greater than 12/min • Tricyclic Antidepressant Overdose <ul style="list-style-type: none"> ▪ Sodium Bicarbonate <ul style="list-style-type: none"> ♦ IV – 1 mEq/kg 	<ul style="list-style-type: none"> • IV/IO access <ul style="list-style-type: none"> ▪ IO access only if pt in extremis • Oral ingestion within 1 hour, awake and gag reflex present: <ul style="list-style-type: none"> ▪ Activated Charcoal <ul style="list-style-type: none"> ♦ PO – 1 gm/kg Max 25 gm • Suspected opiate overdose with respirations less than 12/min: <ul style="list-style-type: none"> ▪ Narcan <ul style="list-style-type: none"> ♦ IV/IM/IO – 0.1 mg/kg Initial max 2 mg May repeat as needed to maintain respirations greater than 12/min • Tricyclic Antidepressant Overdose <ul style="list-style-type: none"> ▪ Sodium Bicarbonate <ul style="list-style-type: none"> ♦ IV – 1 mEq/kg
Base Hospital Orders only	
<ul style="list-style-type: none"> • Beta Blocker Overdose <ul style="list-style-type: none"> ▪ Glucagon <ul style="list-style-type: none"> ♦ IV – 2 mg * May give up to 10 mg if available • Calcium Channel Blocker Overdose <ul style="list-style-type: none"> ▪ Calcium Chloride <ul style="list-style-type: none"> ♦ IV – 1 gm over 1 min 	<ul style="list-style-type: none"> • Beta Blocker Overdose <ul style="list-style-type: none"> ▪ Glucagon <ul style="list-style-type: none"> ♦ IV/IO – 0.1 mg/kg * May give up to 10 mg if available • Calcium Channel Blocker Overdose <ul style="list-style-type: none"> ▪ Calcium Chloride <ul style="list-style-type: none"> ♦ IV/IO – 20 mg/kg over 1 min

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NERVE AGENT POISONING

The Incident Commander is in charge of the scene and you are to follow his/her direction for entering and exiting the scene. Patients in the hot and warm zones **MUST** be decontaminated prior to entering the cold zone.

ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
See Appendix C – “Chempack Cache Deployment Guide”	See Appendix C – “Chempack Cache Deployment Guide”
Expanded Scope	
See Appendix C – “Chempack Cache Deployment Guide”	See Appendix C – “Chempack Cache Deployment Guide”
ALS Prior to Base Hospital Contact	
See Appendix C – “Chempack Cache Deployment Guide”	See Appendix C – “Chempack Cache Deployment Guide”
Base Hospital Orders only	
<p>PRIOR to CHEMPACK ARRIVAL:</p> <ul style="list-style-type: none"> • Patient’s that are exhibiting obvious signs of exposure (SLUDGE) • Hot/Warm Zones <ul style="list-style-type: none"> ▪ Atropine <ul style="list-style-type: none"> ♦ IM – 2.1 mg q 5 min <i>*Repeat until symptoms are relieved</i> <ul style="list-style-type: none"> ▪ •Pralidoxime (2-Pam) <ul style="list-style-type: none"> ♦ IM – 600 mg <i>*If available</i> <i>*Single dose only</i> • IV access should only be performed in the cold zone after complete decontamination • Cold Zone • IV access <ul style="list-style-type: none"> ▪ Atropine <ul style="list-style-type: none"> ♦ IV – 2 mg q 1 min <i>*Repeat until symptoms are relieved</i> <ul style="list-style-type: none"> ♦ IM – 2 mg q 5 min <i>*Repeat until symptoms are relieved</i> <ul style="list-style-type: none"> ▪ Pralidoxime (2-Pam) <ul style="list-style-type: none"> ♦ IM – 600 mg <i>*If available</i> <i>*Single dose only (give if not administered within the hot/warm zones)</i> • For seizures: <ul style="list-style-type: none"> ▪ Midazolam <ul style="list-style-type: none"> ♦ IV – 2 mg <p><i>*Repeat 1 mg q 2 min as needed</i></p>	<p>PRIOR to CHEMPACK ARRIVAL:</p> <ul style="list-style-type: none"> • Patient’s that are exhibiting obvious signs of exposure (SLUDGE) • Hot/Warm Zones <ul style="list-style-type: none"> ▪ Atropine <ul style="list-style-type: none"> ♦ IM – 0.05 mg/kg q 5 min ♦ Minimum dose – 0.1 mg <i>*Repeat until symptoms are relieved</i> • IV/IO access should only be performed in the cold zone after complete decontamination • Cold Zone <ul style="list-style-type: none"> ▪ IV/IO access ▪ Atropine <ul style="list-style-type: none"> ♦ IV/IO – 0.05 mg/kg q 1 min • Minimum dose – 0.1 mg <i>*Repeat until symptoms are relieved</i> <ul style="list-style-type: none"> ♦ IM – 0.05 mg/kg q 5 min • Minimum dose – 0.1 mg <i>*Repeat until symptoms are relieved</i> • For seizures: <ul style="list-style-type: none"> ▪ Midazolam <ul style="list-style-type: none"> ♦ IM – 0.1 mg/kg • Max 5 mg

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<ul style="list-style-type: none"> • Max 5 mg • IM – 0.1 mg/kg • Max 5 mg <p>UPON ARRIVAL OF CHEMPACK:</p> <ul style="list-style-type: none"> • Mark I Nerve Agent Antidote Kits will include – <ul style="list-style-type: none"> ▪ Single dose Atropen (2mg dose) ▪ Single dose Pralidoxime Chloride Injection (300mg/2ml) ▪ Diazepam Auto-Injector (10mg/2ml) 	<p>UPON ARRIVAL OF CHEMPACK:</p> <ul style="list-style-type: none"> • Contents will include: <ul style="list-style-type: none"> ▪ Pediatric Atropen Injector in 2 different amounts: <ul style="list-style-type: none"> ♦ 0.5mg ♦ 1mg ▪ Dosing: <ul style="list-style-type: none"> ♦ Peds <13kg: 0.1mg/kg dose ♦ Peds >=13kg: 0.4mg/kg dose • Diazepam Auto-Injector (10mg/2ml)
<p>Consult with ED Physician for further treatment measures</p>	<p>Consult with ED Physician for further treatment measures</p>
<p>Communication Failure Protocol</p>	
<p>N/A</p>	<p>N/A</p>
<p>Additional Information</p>	
<ul style="list-style-type: none"> • Diazepam is available in the CHEMPACK and may be deployed in the event of a nerve agent exposure. Paramedics may administer diazepam using the following dosages for the treatment of seizures: <ul style="list-style-type: none"> ▪ Adult: 5 mg IM/IV q 10 min titrated to effect (max 30 mg)The Incident Commander is in charge of the scene and you are to follow his/her direction for entering and exiting the scene. Patients in the hot and warm zones MUST be decontaminated prior to entering the cold zone. 	<ul style="list-style-type: none"> • Diazepam is available in the CHEMPACK and may be deployed in the event of a nerve agent exposure. Paramedics may administer diazepam using the following dosages for the treatment of seizures: <ul style="list-style-type: none"> ▪ Pediatric: 0.1 mg/kg IV/IM/IO (max initial dose 5 mg) over 2-3 min q 10 min titrated to effect (max total dose 10 mg)




<ul style="list-style-type: none"> ▪ Glucagon <ul style="list-style-type: none"> ♦ IV – 2 mg * <i>May give up to 10 mg if available</i> • Stimulant/Hallucinogen Overdose <ul style="list-style-type: none"> ▪ Midazolam <ul style="list-style-type: none"> ♦ IV – 2 mg * <i>Repeat 1 mg q 2 min as needed</i> <ul style="list-style-type: none"> ♦ Max 5 mg ▪ IM – 0.1 mg/kg <ul style="list-style-type: none"> ♦ Max 5 mg • Organophosphate Poisoning <ul style="list-style-type: none"> ▪ Atropine <ul style="list-style-type: none"> ♦ IV – 2 mg q 1 min • <i>Repeat until symptoms are relieved</i> 	<ul style="list-style-type: none"> ▪ Glucagon <ul style="list-style-type: none"> ♦ IV/IO – 0.1 mg/kg * <i>May give up to 10 mg if available</i> • Stimulant/Hallucinogen Overdose <ul style="list-style-type: none"> ▪ Midazolam <ul style="list-style-type: none"> ♦ IM – 0.1 mg/kg Max 5 mg • Organophosphate Poisoning <ul style="list-style-type: none"> ▪ Atropine <ul style="list-style-type: none"> ♦ IV/IO – 0.02 mg/kg q 1 min Minimum dose – 0.1mg * <i>Repeat until symptoms are relieved</i>
<p>Consult with ED Physician for further treatment measures</p>	<p>Consult with ED Physician for further treatment measures</p>
<p>Communication Failure Protocol</p>	
<p>N/A</p>	<p>N/A</p>
<p>Additional Information</p>	
<ul style="list-style-type: none"> • For Caustic/Corrosive or petroleum distillate ingestions, DO NOT GIVE CHARCOAL OR INDUCE VOMITING • For Tricyclic Antidepressant Overdose, DO NOT GIVE CHARCOAL • If chest pain present, refer to chest pain policy. DO NOT GIVE ASPIRIN • Organophosphate poisoning – SLUDGE <ul style="list-style-type: none"> ▪ S – Salivation ▪ L – Lacrimation ▪ U – Urination ▪ D – Defecation ▪ G – Gastrointestinal Distress ▪ E – Elimination (vomiting) • Narcan – it is not necessary that the patient be awake and alert. Administer until max dosage is reached or RR greater than 12/min. When given to chronic opioid patients, withdrawal symptoms may present. IM dosing is the preferred route of administration. 	<ul style="list-style-type: none"> • For Caustic/Corrosive or petroleum distillate ingestions, DO NOT GIVE CHARCOAL OR INDUCE VOMITING • For Tricyclic Antidepressant Overdose, DO NOT GIVE CHARCOAL • If chest pain present, refer to chest pain policy. DO NOT GIVE ASPIRIN • Organophosphate poisoning – SLUDGE <ul style="list-style-type: none"> ▪ S – Salivation ▪ L – Lacrimation ▪ U – Urination ▪ D – Defecation ▪ G – Gastrointestinal Distress ▪ E – Elimination (vomiting) • Narcan – it is not necessary that the patient be awake and alert. Administer until max dosage is reached or RR greater than 12/min. When given to chronic opioid patients, withdrawal symptoms may present. IM dosing is the preferred route of administration.



Shortness of Breath – Asthma/ Bronchitis/COPD/Croup	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> Assist patient with prescribed Metered Dose Inhaler if available Administer oxygen as indicated 	<ul style="list-style-type: none"> Assist patient with prescribed Metered Dose Inhaler if available Administer oxygen as indicated
Expanded Scope	
<ul style="list-style-type: none"> Moderate Distress <ul style="list-style-type: none"> Albuterol <ul style="list-style-type: none"> Nebulizer – 5 mg/6 mL <i>*Repeat as needed</i> 	<ul style="list-style-type: none"> Moderate Distress <ul style="list-style-type: none"> Less than 2 years old <ul style="list-style-type: none"> Albuterol <ul style="list-style-type: none"> Nebulizer – 2.5 mg/3 mL 2 years old and greater <ul style="list-style-type: none"> Albuterol <ul style="list-style-type: none"> Nebulizer – 5 mg/6 mL <i>*Repeat as needed</i>
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> Moderate Distress <ul style="list-style-type: none"> Albuterol <ul style="list-style-type: none"> Nebulizer – 5 mg/6 mL <i>*Repeat as needed</i> Severe Distress <ul style="list-style-type: none"> Treatment for moderate distress <ul style="list-style-type: none"> Less than 40 years old: <ul style="list-style-type: none"> Epinephrine 1:1,000 IM – 0.3 mg Consider CPAP for severe distress IV access 	<ul style="list-style-type: none"> Moderate Distress <ul style="list-style-type: none"> Less than 2 years old <ul style="list-style-type: none"> Albuterol <ul style="list-style-type: none"> Nebulizer – 2.5 mg/3 mL 2 years old and greater <ul style="list-style-type: none"> Albuterol <ul style="list-style-type: none"> Nebulizer – 5 mg/6 mL <i>*Repeat as needed</i> Severe Distress <ul style="list-style-type: none"> Treatment for moderate distress <ul style="list-style-type: none"> Epinephrine 1:1,000 <ul style="list-style-type: none"> IM – 0.01 mg/kg Max 0.3 mg Suspected Croup <ul style="list-style-type: none"> Normal Saline <ul style="list-style-type: none"> Nebulizer/Aerosolized Mask – 5 mL Consider CPAP if age 8 years old and greater and in severe distress. IV access
Base Hospital Orders only	
<ul style="list-style-type: none"> All additional care of patients >40 years old. 	N/A
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures

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Communication Failure Protocol	
<p>Severe Distress</p> <ul style="list-style-type: none">▪ Less than 40 years old <p><i>*If no change is apparent 10 minutes after first epinephrine administration:</i></p> <ul style="list-style-type: none">♦ Repeat Epinephrine 1:1,000 - IM – 0.3 mg <ul style="list-style-type: none">▪ 40 years old and greater♦ Epinephrine 1:1,000 - IM – 0.3 mg <p><i>*Only if apparent asthma</i></p> <p><i>*Only if age less than 60 years old</i></p> <p><i>*Only if no improvement with initial therapies</i></p>	<ul style="list-style-type: none">• Severe Distress <p><i>*If no change is apparent 10 minutes after first Epinephrine administration</i></p> <ul style="list-style-type: none">▪ Repeat Epinephrine 1:1,000♦ IM – 0.01 mg/kg Max 0.3 mg
Additional Information	
N/A	N/A

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Shortness of Breath – Pulmonary Edema	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> Administer oxygen as indicated 	<ul style="list-style-type: none"> Administer oxygen as indicated
Expanded Scope	
<ul style="list-style-type: none"> Nitroglycerin <ul style="list-style-type: none"> SL or lingual spray – 0.4 mg q 1 min x 3 <ul style="list-style-type: none"> Repeat 0.4 mg q 2 min No max dosage Hold for SBP < 100 mmHg 	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> Nitroglycerin <ul style="list-style-type: none"> SL or lingual spray – 0.4 mg q 1 min x 3 <ul style="list-style-type: none"> Repeat 0.4 mg q 2 min No max dosage Hold for SBP < 100 mmHg Initiate CPAP for moderate to severe distress <ul style="list-style-type: none"> Perform 12-lead ECG IV access If wheezes are present and suspect COPD/Asthma, consider: <ul style="list-style-type: none"> Albuterol <ul style="list-style-type: none"> Nebulizer – 5mg/6mL 	<ul style="list-style-type: none"> Nitroglycerin <ul style="list-style-type: none"> SL or lingual spray – 0.4 mg q 1 min x 3 <ul style="list-style-type: none"> Repeat 0.4 mg q 2 min No max dosage Hold for SBP < 100 mmHg Initiate CPAP for moderate to severe distress Consider IV access If wheezes are present and suspect COPD/Asthma, consider: <ul style="list-style-type: none"> Albuterol <ul style="list-style-type: none"> Nebulizer – 2.5mg/6mL
Base Hospital Orders only	
<ul style="list-style-type: none"> If patient becomes or presents with hypotension <ul style="list-style-type: none"> Dopamine <ul style="list-style-type: none"> IVPB – 10 mcg/kg/min <p>Consult with ED Physician for further treatment measures</p>	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
N/A	N/A

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SEIZURES	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Protect from injury • Maintain/manage airway as indicated • Administer oxygen as indicated 	<ul style="list-style-type: none"> • Protect from injury • Maintain/manage airway as indicated • For suspected febrile seizures, begin passive cooling measures. If seizure activity persists, see below • Administer oxygen as indicated
Expanded Scope	
<ul style="list-style-type: none"> • Same as BLS and • Determine Blood Glucose level <ul style="list-style-type: none"> ▪ If < 60 ▪ Glucagon IM – 1 mg 	<ul style="list-style-type: none"> • Same as BLS and • Determine Blood Glucose level <ul style="list-style-type: none"> ▪ If < 60 ▪ Glucagon IM – 0.1 mg/kg <ul style="list-style-type: none"> ♦ Max 1 mg
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • Known history of diabetes <ul style="list-style-type: none"> ▪ Determine Blood Glucose level ▪ If < 60 ▪ IV Access <ul style="list-style-type: none"> ♦ D10 <ul style="list-style-type: none"> • IV – 250 mL ▪ Glucagon (if no IV access) <ul style="list-style-type: none"> ♦ IM - 1 mg • Known Seizure Disorder AND Persistent Seizure Activity (greater than 5 minutes in length) <ul style="list-style-type: none"> ▪ Midazolam <ul style="list-style-type: none"> ♦ IM 0.1 mg/kg – ♦ IV Access <ul style="list-style-type: none"> • Repeat 1 mg q 2 min as needed • Max 5 mg • Unknown History AND Persistent Seizure Activity (greater than 5 minutes in length) <ul style="list-style-type: none"> ▪ Midazolam - IM – 0.1mg/kg ▪ Determine Blood Glucose level <ul style="list-style-type: none"> ♦ If <60 treat as above ♦ If >60 <ul style="list-style-type: none"> • Repeat Midazolam • IV - 1 mg q 2 min as needed • Max 5 mg <p style="margin-left: 20px;">OR</p> <ul style="list-style-type: none"> • IM 0.1 mg/kg • Max 5 mg 	<ul style="list-style-type: none"> • Known history of diabetes <ul style="list-style-type: none"> ▪ Determine Blood Glucose level ▪ If < 60 ▪ IV Access: <ul style="list-style-type: none"> ♦ D10 <ul style="list-style-type: none"> • IV – 0.5G/kg (5mL/kg) • Max 25G (250 mL) ▪ No IV Access: <ul style="list-style-type: none"> ♦ Glucagon <ul style="list-style-type: none"> • IM 0.1 mg/kg • Max 1 mg • Known Seizure Disorder AND Persistent Seizure Activity (greater than 5 minutes in length) <ul style="list-style-type: none"> ▪ Midazolam <ul style="list-style-type: none"> ♦ IM – 0.1 mg/kg • Max 5 mg • Unknown History AND Persistent Seizure Activity (greater than 5 minutes in length) <ul style="list-style-type: none"> ▪ Midazolam <ul style="list-style-type: none"> ♦ IM 0.1mg/kg • Max 5 mg ▪ Determine Blood Glucose level <ul style="list-style-type: none"> ♦ If <60 treat as above <ul style="list-style-type: none"> • Consider IV/IO access ♦ Max 1 mg

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<ul style="list-style-type: none"> • 3rd Trimester Pregnancy & No Known Seizure History with either signs and symptoms of eclampsia or active seizures: <ul style="list-style-type: none"> ▪ Magnesium Sulfate <ul style="list-style-type: none"> ♦ IVPB – 2 gm in 50 mL D5W infused over 5 min ♦ MUST Repeat x 1 ♦ Slow or stop infusion if bradycardia, heart block, or decreased respiratory effort occur • Recheck Blood Glucose level 5 min after completion of D10 bolus or 10 min after Glucagon administration <ul style="list-style-type: none"> ▪ If still < 60 ▪ Repeat D10 ▪ IV – 250 mL 	<ul style="list-style-type: none"> • Recheck Blood Glucose level 5 min after completion of D10 bolus or 10 min after Glucagon administration <ul style="list-style-type: none"> ▪ If still < 60 <ul style="list-style-type: none"> ♦ D10 <ul style="list-style-type: none"> • IV – 0.5G/kg (5mL/kg) • Max 25G (250 mL)
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
<ul style="list-style-type: none"> • Treatment with Midazolam as indicated in the following: <ul style="list-style-type: none"> • Continuous seizures > 5 min (or > 2 min in pregnancy) • Repetitive seizures without regaining consciousness • Patients with a known seizure disorder, no longer seizing and with a normal postictal state, AND who have not received ALS interventions, may be treated as a BLS call. 	<ul style="list-style-type: none"> • Treatment with Midazolam as indicated in the following: <ul style="list-style-type: none"> ▪ Continuous seizures > 5 minutes ▪ Repetitive seizures without regaining consciousness • Patients with a known seizure disorder or uncomplicated, apparent pediatric febrile seizures, no longer seizing and with a normal postictal state, AND who have not received ALS interventions, may be treated as a BLS call



SHOCK – HYPOVOLEMIA, SEPSIS	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Evaluate patient lung sounds, if lungs clear <ul style="list-style-type: none"> ▪ place patient in shock position • Administer oxygen as indicated 	<ul style="list-style-type: none"> • Evaluate patient lung sounds, if lungs clear <ul style="list-style-type: none"> ▪ place patient in shock position • Administer oxygen as indicated
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • IV access - large bore preferred <ul style="list-style-type: none"> ▪ Normal Saline ▪ •IV bolus – 1 Liter ♦ Caution with cardiac and/or renal history ♦ Continue to evaluate lung sounds. If signs of CHF, decrease IV to TKO • If vital signs return to within normal limits, decrease IV to TKO • Traumatic Injury – for SBP less than 90 <ul style="list-style-type: none"> ▪ Do not delay transport for first IV attempt ▪ Attempt second IV while enroute to ED 	<ul style="list-style-type: none"> • IV access <ul style="list-style-type: none"> ▪ NS 20mL/kg bolus IV x1 <i>May repeat x1 prior to BH contact</i> ♦ Caution with cardiac and/or renal history ♦ Continue to evaluate lung sounds. If signs of CHF, decrease IV to TKO • If vital signs return to within normal limits, decrease IV to TKO • Traumatic Injury <ul style="list-style-type: none"> ▪ Do not delay transport for first IV attempt ▪ Attempt second IV while enroute to ED
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
<ul style="list-style-type: none"> • If shock persists: <ul style="list-style-type: none"> ▪ Repeat Normal Saline ♦ IV bolus – 1 Liter 	<ul style="list-style-type: none"> • If shock persists: <ul style="list-style-type: none"> ▪ Repeat Normal Saline ♦ IV/IO bolus – 20 mL/kg
Additional Information	
N/A	N/A

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STROKE

ADULT

BLS Procedures

- Perform LOC and neurological assessment
 - Utilize the Cincinnati Stroke Scale:
 - ♦ Facial Droop
 - ♦ Arm Drift
 - ♦ Speech
- Airway management protocol as needed
 - Note: O2: High flow for SPO2 <95% and Low flow for >95%
- C-spine immobilization if evidence of trauma
- Check for Medical alert bracelet/Advanced Directive

Expanded Scope

- Check Blood Glucose – Refer to Altered Neurological Function protocol

ALS Prior to Base Hospital Contact

- Cardiac Monitor
- IV: NS TKO or saline lock: Infuse to keep SBP>100, re-evaluating after each 500 mL, MAX 1L, then call base.
- Base hospital report: include last time seen normal
- Do not delay transport for on-scene assessment.

Base Hospital Orders only

Consult with ED Physician for further treatment measures

Communication Failure Protocol

N/A

Additional Information

Documentation should specifically note “last time seen normal” if information is available.

Cincinnati Stroke Scale Guidelines:

- **Facial Droop**
 - Normal: Both sides of face move equally
 - Abnormal: One side of face does not move at all
- **Arm Drift**
 - Normal: Both arms move equally or not at all
 - Abnormal: One arm drifts compared to the other
- **Speech**
 - Normal: Patient uses correct words with no slurring
 - Abnormal: Slurred or inappropriate words or mute



HEAD / FACE / NECK TRAUMA	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Airway management protocol as needed • C-spine precautions including placing patient supine with the head in the mid-line • Facial trauma special considerations: <ul style="list-style-type: none"> ▪ Check the oropharynx for teeth and dentures. ▪ For displaced teeth, place tooth in emergency dental kit, if available. ▪ Frequent airway suctioning is needed to prevent aspiration of blood, etc • Eye Injuries special considerations: <ul style="list-style-type: none"> ▪ Avoid applying direct pressure to an injured eye. Do not attempt to replace the partially torn globe – stabilize it with a saline soaked gauze. ▪ Acid or alkali injuries: irrigate profusely with saline and remove contact lenses if possible. ▪ With any eye trauma cover both eyes loosely with a protective dressing. ▪ Stabilize impaled objects, do not remove. • Head Trauma special considerations: <ul style="list-style-type: none"> ▪ Scalp hemorrhage can be life threatening – dress with a pressure dressing. ▪ Do not intubate unless unable to ventilate with BVM 	<ul style="list-style-type: none"> • Airway management protocol as needed • C-spine precautions including placing patient supine with the head in the mid-line • Facial trauma special considerations: <ul style="list-style-type: none"> ▪ Check the oropharynx for teeth and dentures. ▪ For displaced teeth, place tooth in emergency dental kit, if available. ▪ Frequent airway suctioning is needed to prevent aspiration of blood, etc • Eye Injuries special considerations: <ul style="list-style-type: none"> ▪ Avoid applying direct pressure to an injured eye. Do not attempt to replace the partially torn globe – stabilize it with a saline soaked gauze. ▪ Acid or alkali injuries: irrigate profusely with saline and remove contact lenses if possible. ▪ With any eye trauma cover both eyes loosely with a protective dressing. ▪ Stabilize impaled objects, do not remove. • Head Trauma special considerations: <ul style="list-style-type: none"> ▪ Scalp hemorrhage can be life threatening – dress with a pressure dressing.
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • Airway management protocol as needed * Do not intubate severely head injured patients unless unable to ventilate by BVM • Cardiac Monitor • IV: NS TKO or saline lock <ul style="list-style-type: none"> ▪ Maintain SBP > 100 ▪ 500 mL NS bolus as needed to achieve above ▪ Reevaluate SBP after each 500 mL bolus to MAX 1L • IO with above fluid protocol ONLY if patient meets IO Policy 538 criteria • Determine initial Glasgow Coma Scale Score, report to Base Hospital <u>immediately</u>. 	<ul style="list-style-type: none"> • Airway management protocol as needed * Do not intubate severely head injured patients unless unable to ventilate by BVM • Cardiac Monitor • IV: NS TKO or saline lock <ul style="list-style-type: none"> ▪ Maintain SBP appropriate for age ▪ NS bolus as needed to achieve above 20 mL / kg, may repeat x1 then contact Base Hospital. • IO with above fluid protocol ONLY if patient meets IO Policy 538 criteria • Determine initial Glasgow Coma Scale Score, utilizing Pediatric Modified GCS report to Base Hospital <u>immediately</u>.

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Santa Barbara County EMS
County Wide Protocols

Policy 533 - 23

• Update Base Hospital to any changes in GCS.	• Update Base Hospital to any changes in Peds GCS.
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
Base Hospital and destination per Trauma Triage Policy #510	Base Hospital and destination per Trauma Triage Policy #510

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CHEST/ABDOMEN/PELVIS TRAUMA	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Airway management protocol as needed • Open chest wound: 3-sided occlusive dressing 	<ul style="list-style-type: none"> • Airway management protocol as needed • Open chest wound: 3-sided occlusive dressing
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • Cardiac Monitor • IV/IO: NS TKO or saline lock <ul style="list-style-type: none"> ▪ Maintain SBP > 100, for controlled hemorrhage ▪ Maintain SBP > 90 for uncontrolled hemorrhage ▪ 500 mL NS bolus as needed to achieve above ▪ Reevaluate SBP after each 500 mL bolus to MAX 1L • For pneumothorax/hemotorax, sit in high Fowlers. <ul style="list-style-type: none"> ▪ If tension pneumothorax, position appropriately and Needle Thoracostomy per Policy 536 	<ul style="list-style-type: none"> • Cardiac Monitor • IV/IO: NS TKO or saline lock <ul style="list-style-type: none"> ▪ Maintain SBP appropriate for age ▪ NS bolus as needed to achieve above <ul style="list-style-type: none"> ♦ 20 mL / kg, may repeat x1 then contact Base Hospital • For pneumothorax/hemotorax, sit in high Fowlers. <ul style="list-style-type: none"> ▪ If tension pneumothorax, position appropriately and Needle Thoracostomy per Policy 536
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
<p>Blunt and penetrating trauma can cause extensive multi-organ intra-abdominal injuries with little or no pain or tenderness for the first few minutes or hours. This is especially true in adults with altered sensorium (drugs, alcohol, head or spinal cord injury) and children.</p> <p>Base Hospital and destination per Trauma Triage Policy #510</p>	<p>Blunt and penetrating trauma can cause extensive multi-organ intra-abdominal injuries with little or no pain or tenderness for the first few minutes or hours. This is especially true in adults with altered sensorium (drugs, alcohol, head or spinal cord injury) and children.</p> <p>Base Hospital and destination per Trauma Triage Policy #510</p>



SPINAL TRAUMA	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Airway management protocol as needed. • Spinal Immobilization as follows: <ul style="list-style-type: none"> ▪ A patient with a mechanism of injury sufficient to result in a spinal injury meeting any one of the following criteria requires spinal immobilization: <ul style="list-style-type: none"> ♦ Not alert and oriented. ♦ Intoxication with alcohol or drugs. ♦ Any painful distracting injury. ♦ Cervical pain. ♦ Cervical tenderness or deformity. ♦ Abnormal strength or sensation in any extremity. <p>* Patients who do not meet any of these criteria do not require spinal immobilization</p>	<ul style="list-style-type: none"> • Airway management protocol as needed. • Spinal Immobilization as follows: <ul style="list-style-type: none"> ▪ A patient with a mechanism of injury sufficient to result in a spinal injury meeting any one of the following criteria requires spinal immobilization: <ul style="list-style-type: none"> ♦ Not alert and oriented. ♦ Intoxication with alcohol or drugs. ♦ Any painful distracting injury. ♦ Cervical pain. ♦ Cervical tenderness or deformity. ♦ Abnormal strength or sensation in any extremity. <p>*Patients who do not meet any of these criteria do not require spinal immobilization</p> <ul style="list-style-type: none"> ▪ The infant and child's large head influences immobilization procedures. Spinal immobilization is not complete until the entire body is secured. ▪ Infants and children are less likely to cooperate with immobilization. Well-immobilized children will fight less than those poorly immobilized due to a "swaddling effect."
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • Cardiac Monitor • IV/IO: NS TKO or saline lock <ul style="list-style-type: none"> ▪ Maintain SBP > 100, for controlled hemorrhage ▪ Maintain SBP > 90 for uncontrolled hemorrhage ▪ 500 mL NS bolus as needed to achieve above ▪ Reevaluate SBP after each 500 mL bolus to MAX 1L 	<ul style="list-style-type: none"> • Cardiac Monitor • IV/IO: NS TKO or saline lock <ul style="list-style-type: none"> ▪ Maintain SBP appropriate for age ▪ NS bolus as needed to achieve above <ul style="list-style-type: none"> ♦ 20 mL / kg, may repeat x1 then contact Base Hospital
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
Base Hospital and destination per Trauma Triage Policy #510	Base Hospital and destination per Trauma Triage Policy #510

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EXTREMITY TRAUMA	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> Control bleeding with direct pressure, cover open fractures with sterile saline soaked gauze Splint all dislocations in position found and transport as soon as possible. Apply splints and re-check neurovascular status after any manipulation and periodically en route. For amputations: Bandage wound with dressing moistened with sterile saline Wrap amputated parts in sterile gauze/saline, place in bag, keep cool. Do not place tissue directly in ice. Tourniquet for uncontrollable bleeding – per policy 542 	<ul style="list-style-type: none"> Control bleeding with direct pressure, cover open fractures with sterile saline soaked gauze Splint all dislocations in position found and transport as soon as possible. Apply splints and re-check neurovascular status after any manipulation and periodically en route. For amputations: Bandage wound with dressing moistened with sterile saline Wrap amputated parts in sterile gauze/saline, place in bag, keep cool. Do not place tissue directly in ice. Tourniquet for uncontrollable bleeding – per policy 542
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> Return extremity to anatomic position if possible as resistance/pain allow If vital signs normal; <ul style="list-style-type: none"> IV: NS TKO or saline lock Morphine per Pain Protocol Tourniquet for uncontrollable bleeding – per policy 542 For hypotension: <ul style="list-style-type: none"> Supine position IV/IO: NS TKO or saline lock <ul style="list-style-type: none"> Maintain SBP > 100, for controlled hemorrhage Maintain SBP > 90 for uncontrolled hemorrhage 500 mL NS bolus as needed to achieve above Reevaluate SBP after each 500 mL bolus to MAX 1L 	<ul style="list-style-type: none"> Return extremity to anatomic position if possible as resistance/pain allow If vital signs normal <i>consider</i>; <ul style="list-style-type: none"> IV: NS TKO or saline lock Morphine per Pain Protocol Tourniquet for uncontrollable bleeding – per policy 542 For hypotension: <ul style="list-style-type: none"> Supine position IV/IO: NS TKO or saline lock <ul style="list-style-type: none"> Maintain SBP appropriate for age NS bolus as needed to achieve above 20 mL / kg, may repeat x1 then contact Base Hospital
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A

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Additional Information

Note in history and documentation: Localized swelling, angulation, lacerations, exposed bone, crepitus, neurovascular compromise, estimated blood loss

Base Hospital and destination per Trauma Triage Policy #510

Note in history and documentation: Localized swelling, angulation, lacerations, exposed bone, crepitus, neurovascular compromise, estimated blood loss

Base Hospital and destination per Trauma Triage Policy #510

A handwritten signature in blue ink, appearing to read "Angelo Salvucci".



BURNS	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> Remove rings, constrictive clothing and garments made of synthetic material Assess for chemical, thermal, electrical, or radiation burns and treat accordingly If < 10% Total Body Surface Area (TBSA) is burned, cool with saline dressings and elevate burned extremities if possible Once area is cooled, remove saline dressings and cover with dry, sterile burn sheets Maintain body heat at all times Administer oxygen as indicated 	<ul style="list-style-type: none"> Remove rings, constrictive clothing and garments made of synthetic material Assess for chemical, thermal, electrical, or radiation burns and treat accordingly If < 10% Total Body Surface Area (TBSA) is burned, cool with saline dressings and elevate burned extremities if possible Once area is cooled, remove saline dressings and cover with dry, sterile burn sheets Maintain body heat at all times Administer oxygen as indicated
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> IV/IO access Morphine – per Pain Control Protocol If TBSA > 10% or hypotension is present: <ul style="list-style-type: none"> Normal Saline – IV/IO bolus – 1 Liter 	<ul style="list-style-type: none"> IV/IO access Morphine – per Pain Control Protocol If TBSA > 10% or hypotension is present: <ul style="list-style-type: none"> Normal Saline – IV/IO bolus 20mL / kg may repeat x1 prior to BH contact
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
<p>Additional Information:</p>	<p>Additional Information:</p>

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Crush Injury / Syndrome	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Perform spinal precautions as indicated • Determine Potential vs. Actual Crush Syndrome • Administer oxygen as indicated 	<ul style="list-style-type: none"> • Perform spinal precautions as indicated • Determine Potential vs. Actual Crush Syndrome • Administer oxygen as indicated
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • Potential crush injury <ul style="list-style-type: none"> ▪ IV access ▪ Maintain body heat ▪ Release compression ▪ Monitor for cardiac dysrhythmias • Actual crush syndrome <ul style="list-style-type: none"> ▪ Initiate 2nd IV access <ul style="list-style-type: none"> ♦ Normal Saline - IV bolus – 1 Liter *Caution with cardiac and/or renal history 	<ul style="list-style-type: none"> • Potential crush injury <ul style="list-style-type: none"> ▪ IV access ▪ Maintain body heat ▪ Release compression ▪ Monitor for cardiac dysrhythmias • Actual crush syndrome <ul style="list-style-type: none"> ▪ Initiate 2nd IV access if possible or establish IO <ul style="list-style-type: none"> ♦ Normal Saline - IV/IO bolus – 20 mL/kg *Caution with cardiac and/or renal history
Base Hospital Orders only	
<ul style="list-style-type: none"> • Actual crush syndrome <ul style="list-style-type: none"> ▪ Sodium Bicarbonate <ul style="list-style-type: none"> ♦ IV mix – 1 mEq/kg ♦ Added to 1st Liter of Normal Saline ▪ Albuterol <ul style="list-style-type: none"> ♦ Nebulizer – 5 mg/6 mL ♦ Repeat x 2 ▪ Calcium Chloride <ul style="list-style-type: none"> ♦ IV - 1gm over 1 minute • For continued shock <ul style="list-style-type: none"> ▪ Repeat Normal Saline - IV bolus – 1 Liter • For ongoing extended entrapment and no response to fluid therapy: <ul style="list-style-type: none"> ▪ Dopamine - IVPB – 10 mcg/kg/min 	<ul style="list-style-type: none"> • Actual crush syndrome <ul style="list-style-type: none"> ▪ Sodium Bicarbonate <ul style="list-style-type: none"> ♦ IV mix– 1 mEq/kg ♦ Added to 1st Liter of Normal Saline ▪ Albuterol <ul style="list-style-type: none"> ♦ Nebulizer – 2.5 mg/3 mL ♦ Repeat x 2 ▪ Calcium Chloride <ul style="list-style-type: none"> ♦ IV mix - • For continued shock <ul style="list-style-type: none"> ▪ Repeat Normal Saline - IV/IO bolus – 20 mL/kg • For ongoing extended entrapment and no response to fluid therapy: <ul style="list-style-type: none"> ▪ Dopamine - IVPB – 10 mcg/kg/min
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures

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Communication Failure Protocol	
N/A	N/A
Additional Information	
<ul style="list-style-type: none">• If elderly or cardiac history is present, use caution with fluid administration. Reassess and treat accordingly.• Dysrhythmias are usually secondary to Hyperkalemia. ECG monitor may show: Peaked T-waves, Absent P-waves, widened QRS complexes, bradycardia• Calcium Chloride and Sodium Bicarbonate precipitate when mixed. Strongly consider starting / utilizing a second IV (if feasible) for administration of Calcium Chloride	<ul style="list-style-type: none">• If cardiac history is present, use caution with fluid administration. Reassess and treat accordingly.• Dysrhythmias are usually secondary to Hyperkalemia. ECG monitor may show: Peaked T-waves, Absent P-waves, widened QRS complexes, bradycardia• Calcium Chloride and Sodium Bicarbonate precipitate when mixed. Strongly consider starting / utilizing a second IV (if feasible) for administration of Calcium Chloride

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TRAUMATIC ARREST	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Airway management protocol as needed • AED • Spinal Immobilization PRN – reference Spinal Trauma Protocol 	<ul style="list-style-type: none"> • Airway management protocol as needed • AED • Spinal Immobilization PRN – reference Spinal Trauma Protocol
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • Cardiac Monitor • Immediate Transport • IV/IO: 1-2 large-bore IVs - NS open <ul style="list-style-type: none"> ▪ start enroute unless delay in extrication/loading • Treat dysrhythmias per specific Cardiac Arrest Protocol • Withhold or terminate resuscitation in traumatic arrest if: <ul style="list-style-type: none"> ▪ Time from arrest to arrival at the nearest Hospital will exceed 20 minutes OR ▪ The patient has remained in Cardiac Arrest after > 20 minutes of extended extrication. (Refer to Policy 509) 	<ul style="list-style-type: none"> • Cardiac Monitor • Immediate Transport • IV/IO: 1-2 large-bore IVs - NS open <ul style="list-style-type: none"> ▪ start enroute unless delay in extrication/loading • Treat dysrhythmias per specific Cardiac Arrest Protocol • All pediatric resuscitations will be transported to the closest receiving hospital.
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
<ul style="list-style-type: none"> • IO to be used if unable to establish an IV. • Do not delay transport to attempt intubation. • In patients for whom mechanism of injury does not correlate with clinical condition, suggesting a non-traumatic cause of the arrest, a standard resuscitation should be initiated. 	<ul style="list-style-type: none"> • IO to be used if unable to establish an IV. • In patients for whom mechanism of injury does not correlate with clinical condition, suggesting a non-traumatic cause of the arrest, a standard resuscitation should be initiated.

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BITES & STINGS	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Animal/insect bites: <ul style="list-style-type: none"> ▪ Flush site with sterile water ▪ Control bleeding ▪ Apply bandage • Snake bites/envenomations: <ul style="list-style-type: none"> ▪ Remove rings and constrictions ▪ Immobilize the affected part in dependent position ▪ Avoid excessive activity • Bee stings: <ul style="list-style-type: none"> ▪ If present, remove stinger ▪ Apply ice pack • Jellyfish stings: <ul style="list-style-type: none"> ▪ Rinse thoroughly with normal saline, vinegar, baking soda. ▪ DO NOT: <ul style="list-style-type: none"> ♦ Rinse with fresh water, alcohol ♦ Rub with wet sand ♦ Apply heat • All other marine animal stings: <ul style="list-style-type: none"> ▪ If present, remove barb ▪ Immerse in hot water if available • Administer oxygen as indicated • All bites other than snake bites may be treated as a BLS call 	<ul style="list-style-type: none"> • Animal/insect bites: <ul style="list-style-type: none"> ▪ Flush site with sterile water ▪ Control bleeding ▪ Apply bandage • Snake bites/envenomations: <ul style="list-style-type: none"> ▪ Remove rings and constrictions ▪ Immobilize the affected part in dependent position ▪ Avoid excessive activity • Bee stings: <ul style="list-style-type: none"> ▪ If present, remove stinger ▪ Apply ice pack • Jellyfish stings: <ul style="list-style-type: none"> ▪ Rinse thoroughly with normal saline, vinegar, baking soda. ▪ DO NOT: <ul style="list-style-type: none"> ♦ Rinse with fresh water, alcohol ♦ Rub with wet sand ♦ Apply heat • All other marine animal stings: <ul style="list-style-type: none"> ▪ If present, remove barb ▪ Immerse in hot water if available • Administer oxygen as indicated • All bites other than snake bites may be treated as a BLS call
Expanded Scope	
<p>Same as BLS</p> <ul style="list-style-type: none"> • See Allergic Reaction / Anaphylaxis Protocol as appropriate. 	<p>Same as BLS</p>
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • IV access for snake bites • Monitor for allergic reaction or anaphylaxis (per Allergic Reaction / Anaphylaxis Protocol) • Morphine – per Pain Control Protocol 	<ul style="list-style-type: none"> • IV access for snake bites • Monitor for allergic reaction or anaphylaxis (per Allergic Reaction / Anaphylaxis Protocol) • Morphine – per Pain Control Protocol
Base Hospital Orders only	
<p>Consult with ED Physician for further treatment measures</p>	<p>Consult with ED Physician for further treatment measures</p>

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Communication Failure Protocol	
N/A	N/A
Additional Information	
N/A	N/A

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HEAT EMERGENCIES	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> Place patient in cool environment Initiate active cooling measures (remove clothing, fanning, spray with water) Administer oxygen as indicated 	<ul style="list-style-type: none"> Place patient in cool environment Initiate active cooling measures (remove clothing, fanning, spray with water) Administer oxygen as indicated
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> Determine Blood Glucose IV access <ul style="list-style-type: none"> Normal Saline - IV bolus – 1 Liter MAX (titrate to maintain SBP>100) <i>*Caution with cardiac and/or renal history</i> 	<ul style="list-style-type: none"> Determine Blood Glucose IV access <ul style="list-style-type: none"> Normal Saline - IV/IO bolus – 20 mL/kg x1 <i>*Caution with cardiac and/or renal history</i>
Base Hospital Orders only	
<ul style="list-style-type: none"> If hypotensive after initial IV fluid bolus: <ul style="list-style-type: none"> Repeat Normal Saline - IV bolus – 1 Liter 	<ul style="list-style-type: none"> If hypotensive after initial IV fluid bolus: <ul style="list-style-type: none"> Repeat Normal Saline - IV bolus – 20 mL/kg
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
<ul style="list-style-type: none"> If hypotensive after initial IV fluid bolus: <ul style="list-style-type: none"> Repeat Normal Saline - IV bolus – 1 Liter 	<ul style="list-style-type: none"> If hypotensive after initial IV fluid bolus: <ul style="list-style-type: none"> Repeat Normal Saline - IV bolus – 20 mL/kg
Additional Information	
<ul style="list-style-type: none"> For seizure go to Seizures Protocol 	<ul style="list-style-type: none"> For seizure go to Seizures Protocol

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HYPOTHERMIA	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Monitor vital signs for 1 minute: • If no pulse begin chest compressions • Acceptable ranges for severe hypothermia <ul style="list-style-type: none"> ▪ Respiratory Rate: 4-6/minute ▪ Heart rate: 20-30/minute • Gently move patient to warm environment • Remove wet clothing and replace with dry blankets • Insulate head • Begin passive rewarming • STAT transport if no shivering (indicates core temp below 90°) • Administer oxygen as indicated 	<ul style="list-style-type: none"> • Monitor vital signs for 1 minute: • If no pulse begin chest compressions • Acceptable ranges for severe hypothermia <ul style="list-style-type: none"> ▪ Respiratory Rate: 4-6/minute ▪ Heart rate: 20-30/minute • Gently move patient to warm environment • Remove wet clothing and replace with dry blankets • Insulate head • Begin passive rewarming • STAT transport if no shivering (indicates core temp below 90°) • Administer oxygen as indicated
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • IV access (if needed for medication or fluid administration) <ul style="list-style-type: none"> ▪ If administering fluid, avoid administering cold fluids 	<ul style="list-style-type: none"> • IV access (if needed for medication or fluid administration) <ul style="list-style-type: none"> ▪ If administering fluid, avoid administering cold fluids
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
<ul style="list-style-type: none"> • For Frostbite: <ul style="list-style-type: none"> ▪ Wrap affected extremity in blankets or clothing ▪ DO NOT rub or otherwise attempt active rewarming. ▪ Pain management per Pain Protocol 	<ul style="list-style-type: none"> • For Frostbite: <ul style="list-style-type: none"> ▪ Wrap affected extremity in blankets or clothing ▪ DO NOT rub or otherwise attempt active rewarming. ▪ Pain management per Pain Protocol

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WATER EMERGENCIES	
ADULT	PEDIATRIC – (14 years and under)
BLS Procedures	
<ul style="list-style-type: none"> • Airway management protocol as needed • Immobilize C-spine as indicated, or if suspected traumatic event. (Refer to Spinal Trauma Protocol) • Patient flat on gurney (FOR DIVING INJURIES) • Remove wet clothing, keep patient warm & dry 	<ul style="list-style-type: none"> • Airway management protocol as needed • Immobilize C-spine as indicated, or if suspected traumatic event. (Refer to Spinal Trauma Protocol) • Patient flat on gurney (FOR DIVING INJURIES) • Remove wet clothing, keep patient warm & dry
Expanded Scope	
Same as BLS	Same as BLS
ALS Prior to Base Hospital Contact	
<ul style="list-style-type: none"> • Cardiac Monitor • IV: NS TKO or saline lock: <ul style="list-style-type: none"> ▪ Infuse to keep SBP>100, re-evaluating after each 500 mL, MAX 1L 	<ul style="list-style-type: none"> • Cardiac Monitor • IV: NS TKO or saline lock if does not delay transport. • If hypotensive: <ul style="list-style-type: none"> ▪ NS bolus 20mL /kg x1 ▪ to maintain age appropriate SBP ▪ May repeat x1 PRN prior to BH contact
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Communication Failure Protocol	
N/A	N/A
Additional Information	
<ul style="list-style-type: none"> • Early BH contact, to allow for assigned destination • Minimize time at scene. • Review History and report / document: <ul style="list-style-type: none"> ▪ Use of any drugs, Trauma, Extremes of Age ▪ Location of pain (for decompression injuries) ▪ Dive History: Depth, Time down. ▪ Abnormal Neurological findings ▪ Skin: Cool skin, especially abdominal wall. ▪ Bilateral breath sounds ▪ Subcutaneous emphysema with retro-sternal discomfort. ▪ Dysphagia, hoarseness, crepitus. • Consider associated trauma to C-spine to be present until proven otherwise 	<ul style="list-style-type: none"> • Early BH contact, to allow for assigned destination • Minimize time at scene. • Review History and report / document: <ul style="list-style-type: none"> ▪ Use of any drugs, Trauma, Extremes of Age ▪ Location of pain (for decompression injuries) ▪ Dive History: Depth, Time down. ▪ Abnormal Neurological findings ▪ Skin: Cool skin, especially abdominal wall. ▪ Bilateral breath sounds ▪ Subcutaneous emphysema with retro-sternal discomfort. ▪ Dysphagia, hoarseness, crepitus. • Consider associated trauma to C-spine to be present until proven otherwise

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CHILDBIRTH

ADULT

BLS Procedures

- Determine
 - number of pregnancies (gravida)
 - number of deliveries (para)
 - due date (weeks of gestation)
 - onset/duration/frequency/intensity of contractions
 - if a rupture of membranes has occurred (including color)
 - if any expected complications during pregnancy are present
- Visualize to determine if there is crowning or any abnormal presenting part

PROLAPSED CORD	OTHER PRESENTING PART NOT DELIVERING	DELIVERING
<ul style="list-style-type: none"> ▪ Cover cord with wet saline dressing ▪ Place mother in left-lateral position ▪ Provide constant manual pressure on presenting part to avoid cord compression ▪ Initiate Code-3 transport 	<ul style="list-style-type: none"> ▪ Elevate hips ▪ Place mother in left-lateral position ▪ Initiate Code-3 transport 	<ul style="list-style-type: none"> ▪ Assist delivery while initiating Code-3 transport ▪ Assist with breech delivery while supporting the infant's body (covering to maintain body warmth) ▪ Initiate Code-3 transport

- Initiate Code-3 transport if there is partial delivery of the infant and no further progress after 1-2 minutes
- If the HEAD is crowning, prepare to assist mother with delivery –
 - Guide baby out
 - If infant does not cry vigorously or appears to be having difficulty clearing it's airway
 - ♦ *Suction ONLY if secretions including meconium, causes airway obstruction*
 - ♦ If suctioning, always suction mouth first, then nares
 - Dry and stimulate (rub gently, but briskly with warm towel)
 - Note time of birth
 - Double clamp cord and cut with sterile scissors between clamps
 - Begin transport
 - * *Do not wait for placenta to deliver*
 - If placenta delivery is present, assist and package, then gently massage fundus
- *Do not massage fundus until the placenta has delivered*
- If the BUTT is “crowning:”
 - Have the mother push until the butt and legs are out to the mid-calves and then assist the feet out.
 - If only one leg is presenting, reach up and bring down the second leg.
 - Grab the torso carefully with a towel or blanket (be careful not to squeeze the infant's abdomen)
 - Pull down a loop of cord to allow for further delivery and then rotate baby right or left, whichever is easier, to deliver the top shoulder.
 - Raise body to deliver the bottom shoulder.
 - Put gloved finger inside mouth and flex the chin toward the chest.
 - Gently pivot the baby upward without pulling on the head. An assistant can provide suprapubic pressure to assist you perform the delivery.
 - Double clamp the cord and cut with sterile scissors or scalpel between clamps.

Fetal assessment – Apgar score at 1 minute and 5 minutes post-delivery

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Expanded Scope

Same as BLS

ALS Prior to Base Hospital Contact

- IV Access
 - Consider NS TKO or saline lock:
 - Infuse to keep SBP>100, re-evaluating after each 500 mL, MAX 1L

Base Hospital Orders only

Consult with ED Physician for further treatment measures

Communication Failure Protocol

N/A


Additional Information

Complete Fetal Assessment (APGAR Score) at 1 and 5 minutes post delivery as follows:

APGAR score	0	1	2
A - Appearance	Blue/Pale	Pink w/ blue extremities	Pink
P - Pulse	Absent	< 100 bpm	> 100 bpm
G - Grimace (reflexes)	Absent	Grimace	Cough/Cry/Sneeze
A - Activity (muscle tone)	Limp	Some flexion	Active
R - Respirations	Absent	Slow	Good cry

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NEONATAL RESUSCITATION

28 days and under

BLS Procedures

Newly Born Infant

- Provide warmth, dry briskly and discard wet linen
- Suction ONLY if secretions, including meconium, cause airway obstruction
- Assess while drying infant
 - ♦ Full term?
 - ♦ Crying or breathing?
 - ♦ Good muscle tone?
- If "YES" to all three
 - ♦ Place skin-to-skin with mother
 - ♦ Cover both with dry linen
 - ♦ Observe breathing, activity, color
- If "NO" to any of three
 - ♦ Stimulate briefly (<15 seconds)
 - Flick soles of infant's feet
 - Briskly rub infant's back
- Provide warm/dry covering
- Continue to assess

Newly Born Infant or 28 days of age or less

- Assess Breathing
 - If crying or breathing, assess circulation
 - If apneic or gasping
 - ♦ Positive pressure ventilations (PPV) with BVM and ROOM AIR at 40-60 breaths per minute for 30 seconds
 - ♦ Continue PPV, reassessing every 30 seconds, until infant is breathing adequately
 - Reassess breathing, assess circulation
- Assess Circulation
 - If HR between 60 and 100 bpm
 - ♦ PPV with BVM and **ROOM AIR** at 40-60 breaths per minute for 30 seconds
 - ♦ Continue PPV, reassessing every 30 seconds, until infant maintains HR >100 bpm
 - If HR < 60 bpm
 - ♦ CPR at 3:1 ratio for 30 seconds
 - ♦ 90/min compressions
 - ♦ 30/min ventilations
 - ♦ Continue CPR, reassessing every 30 seconds, until HR > 60 bpm
 - ♦ If no improvement after 90 seconds of ROOM AIR CPR, add supplemental O2 until HR > 100

Expanded Scope

Same as BLS

ALS Prior to Base Hospital Contact


- Establish IO line **only** in presence of CPR
- Asystole OR Persistent Bradycardia < 60 bpm or PEA
 - Epinephrine **1:10,000**
 - IO – **0.01mg/kg** (0.1mL/kg) q 3-5 min



Base Hospital Orders only	
Consult with ED Physician for further treatment measures	
Communication Failure Protocol	
N/A	
Additional Information	
<ul style="list-style-type: none">• Resuscitation efforts may be withheld for extremely preterm infants (< 23 weeks or < 9 inches long).<ul style="list-style-type: none">▪ Sensitivity to the desires of the parent(s) may be considered.▪ If uncertain as to gestational age, begin resuscitation.	

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OB / GYN (Pre-eclampsia, Eclampsia, Vaginal Bleeding & Miscarraige)
ADULT
BLS Procedures
<ul style="list-style-type: none"> • Airway management protocol as needed • Vaginal Bleeding/Spontaneous Abortion: <ul style="list-style-type: none"> ▪ Place pad or large dressing over vaginal opening ▪ Save and transport all tissue or fetal remains passed • Pre-Eclampsia/Eclampsia: <ul style="list-style-type: none"> ▪ Minimize stimulation (lights, noise, other stressors) ▪ Left lateral position ▪ Refer to Seizure Protocol as needed, including for Magnesium Sulfate administration.
Expanded Scope
Same as BLS
ALS Prior to Base Hospital Contact
<ul style="list-style-type: none"> • IV: NS TKO or saline lock: <ul style="list-style-type: none"> ▪ Infuse to keep SBP>100, re-evaluating after each 500 mL, MAX 1L
Base Hospital Orders only
Consult with ED Physician for further treatment measures
Communication Failure Protocol
N/A
Additional Information
<ul style="list-style-type: none"> • Spontaneous abortion of a fetus 23 weeks gestational age or greater should be considered a neonatal resuscitation. Refer to Neonatal Resuscitation Protocol. • Do not pack the vagina with any material to stop bleeding. A bulky dressing or pad may be used externally to absorb blood flow. • History/report/documentation should include: <ul style="list-style-type: none"> ▪ Last menstrual period and possibility of pregnancy. ▪ Duration and amount of any bleeding, estimated blood loss (EBL), passage of the products of conception, hypotension ▪ If pregnant, gestational age of fetus, gravida/para, and anticipated problems (placenta previa, pre-eclampsia, lack of prenatal care, use of narcotics or stimulants, etc.). ▪ Presence of contractions, cramping or discomfort. ▪ Pre-eclampsia or eclampsia: altered mental status or seizures, hypertension.

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Pediatric Vital Sign Normal Ranges

(Utilizing AHA PALS Guidelines)

Age Group	Respiratory Rate	Awake Heart Rate	Systolic Blood Pressure	Weight in kilos	Weight in pounds
Newborn	30 - 60	85 - 205	60 - 84	2 - 3	4.5 - 7
Infant (1-12 months)	30 - 60	80 - 140	73 - 105	4 - 10	9 - 22
Toddler (1-3 yrs.)	24 - 40	80 - 130	67 - 106	10 - 14	22 - 31
Preschooler (3-5 yrs.)	22 - 34	80 - 120	79 - 115	14 - 18	31 - 40
School Age (6-12 yrs.)	18 - 30	70 - 110	79 - 115	20 - 42	41 - 92
Adolescent (13+ yrs.)	12 - 16	60 - 100	93 - 131	>50	>110

- The **patient's** normal range should always be taken into consideration.
- Heart rate, BP & respiratory rate are expected to increase during times of fever or stress.
- Respiratory rate on infants should be counted for a full 60 seconds.
- In a clinically decompensating child, the blood pressure will be the **last** to change. Just because your pediatric patient's BP is normal, don't assume that your patient is "stable".
- Bradycardia in children is an ominous sign, usually a result of hypoxia. Act quickly, as this child is extremely critical.


APGAR Score

Complete Fetal Assessment (APGAR Score) at 1 and 5 minutes post delivery as follows:

APGAR score	0	1	2
A - Appearance	Blue/Pale	Pink w/ blue extremities	Pink
P – Pulse	Absent	< 100 bpm	> 100 bpm
G – Grimace (reflexes)	Absent	Grimace	Cough/Cry/Sneeze
A – Activity (muscle tone)	Limp	Some flexion	Active
R – Respirations	Absent	Slow	Good cry

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Glascow Coma Scale

ADULT	PEDIATRIC
Eye opening	Eye opening
Spontaneous 4	Spontaneous 4
To speech 3	To speech 3
To pain 2	To pain 2
No response 1	No response 1
Best verbal response	Best verbal response
Oriented and converses 5	Coos, babbles 5
Disoriented and converses 4	Cries but consolable 4
Inappropriate words 3	Persistently irritable 3
Incomprehensible sounds 2	Grunts to pain/restless 2
No response 1	No response 1
Best motor response	Best motor response
Obeys verbal command 6	Normal movements 6
Localizes pain 5	Localizes pain 5
Flexion - withdraws from pain 4	Withdraws from pain 4
Flexion – abnormal 3	Flexion – abnormal 3
Extension 2	Extension 2
No response 1	No response 1
E + V + M = 3 to 15	E + V + M = 3 to 15

Cincinnati Stroke Scale

•Facial Droop

- Normal: Both sides of face move equally
- Abnormal: One side of face does not move at all

•Arm Drift

- Normal: Both arms move equally or not at all
- Abnormal: One arm drifts compared to the other

•Speech

- Normal: Patient uses correct words with no slurring
- Abnormal: Slurred or inappropriate words or mute

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CHEMPACK CACHE DEPLOYMENT Guide

CHEMPACK Cache Information

The CHEMPACK Project, part of the Strategic National Stockpile (SNS) Program, is designed to provide a 'forward' and sustainable resource of chemical and nerve agent antidotes throughout the United States. CHEMPACK caches placed in Santa Barbara County are managed by the federal Centers for Disease Control and Prevention (CDC).

There are **two types** of CHEMPACK caches:

- **EMS cache** containers are primarily auto-injectors designed for pre-hospital emergency responder use, but are appropriate for hospital emergency departments as well.
- **HOSPITAL cache**, designed for hospital and treatment center use, has more multi-use vials.

There are **2 EMS caches and 1 hospital cache** in Santa Barbara County:

- Each **EMS cache should treat 450** and each **hospital cache 1,000** patients of 30% mild, 40% moderate, and 30% severe cases.

CHEMPACK logistics:

- CHEMPACK container dimensions: 60.5" (Height) X 32.5" (Width) X 60.5" (Length)
- Total Weight: >700 lbs.
- CHEMPACK cache medications are in boxes that may be removed from the container and transported in passenger vehicles.

For maximum effectiveness, CHEMPACKs need to reach affected patients within 60 minutes.

Authorized CHEMPACK deployment requestors:

- Incident Commander
- Hospital ED Manager
- Santa Barbara County EMS Duty Officer
- Health Officer (Medical/Health Operational Area Coordinator)
- Regional Disaster Medical/Health Coordinator or Specialist
- California Department of Public Health staff
- California Emergency Medical Services Authority staff

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Record the following information when Chempack medications are requested in response to a nerve agent or chemical exposure:	
Location	
Incident Commander Name, Call Sign and Telephone Number	
Incident Command Post Location	
Required Information Prior to Activation:	
Nature and severity of chemical release:	
Estimated number of patients:	
<p>Based on estimated number of patients, the staff housing the CHEMPACK, the requesting hospital or the EMS duty officer will select the appropriate number of cases to deploy.</p> <p>The cases of these medications are inside the Chempack container and may be removed and transported in the back of a passenger or other vehicle.</p>	<p style="text-align: center;">EMS Cache</p> <p>_____ Mark I auto injectors. (1 case of 240 injectors for up to 50 patients. 5 cases per EMS cache-yellow)</p> <p>_____ Diazepam 5 mg/ml auto injector (1 case of 150 injectors for up to 50 patients. 2 cases per EMS cache-green)</p> <p>_____ Atropen 0.5 mg deploy for PEDS (1 case of 144 injectors for up to 50 PEDS. 1 case per EMS cache-purple)</p> <p>_____ Atropen 1.0 mg deploy for PEDS (1 case of 144 injectors for up to 50 PEDS. 1 case per EMS cache-grey).</p> <p style="text-align: center;">Hospital Cache</p> <p style="text-align: center;">includes autoinjectors plus:</p> <p>_____ Diazepam 5 mg/ml in 10 ml vial (25 per case, 26 cases in cache)</p> <p>_____ Atropine Sulfate, 0.4 mg/ml in 20 ml. (100 per case, 9 cases in cache).</p> <p>_____ Pralidoxime 1 gm in 20 ml. (276 per case, 10 cases per cache)</p> <p>_____ Sterile water for injections (100 per case, 28 cases per cache)</p>
Staging location for delivery at the scene:	

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Chempack Deployment Objectives

- **Alert the Chempack custodial sites** to ready the cache for deployment and stand by for further instructions.
- **Determine which caches to transport** based on the number of victims. The Chempack custodial hospital, the EMS duty officer, or receiving hospital will determine which EMS or Hospital CHEMPACKs to deploy and the quantity of items needed from each cache at each location (scene or hospital).
- **Determine route and staging site** for delivery to the scene as well as to receiving hospitals. Incident Commander on scene will provide routing instruction and staging location for delivery.
- **Arrange Code 3 transport** for EMS cache items to the incident site and Hospital cache items to the receiving hospital(s). *Note: Due to proximity, portions of the EMS cache at Goleta Valley Cottage Hospital may be transported for use in a hospital in southern Santa Barbara County.*
- **Notify the Chempack custodial site(s)** of the name of agency(s) which will arrive to take custody of the Chempack assets.
- **Assure that hospitals have secured** their Chempack custodial and receiving hospital sites with their own security personnel or in coordination with Sheriff or PD.

Immediate Concerns

	<i>Task</i>	<i>Yes</i>	<i>No</i>	<i>Notes/Time/Who Notified</i>
1.	Alert EMS Duty Officer			
2.	Alert OES			
3.	Alert CHEMPACK Custodial sites. Contact the two CHEMPACK Custodial Sites: <ul style="list-style-type: none"> • Request them to ready their caches. • Tell the custodial agents to stand by for information on who will be making the pick up. • Remind site to arrange for security at Chempack site. 			

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<p><u>Marian Regional Medical Center (2 caches)</u></p> <p>1400 E. Church St. Santa Maria, CA 93454</p> <p>24/7: (805) 739-3000 or (805) 739-3450 ask for ED Guerena, Director of Pharmacy; or Lisa Zurek, Asst. Director of Pharmacy; or Nursing Supervisor</p> <p>(1) EMS Chempack (for incidents in the field)</p> <p>(1) Hospital Chempack</p> <p><u>Goleta Valley Cottage Hospital (1 cache)</u></p> <p>351 South Patterson Avenue Santa Barbara, CA 93111</p> <p>967-3411 24/7</p> <p><i>GVCH Emergency Department Manager or Environmental Safety Manager</i></p> <p>(1) EMS Chempack (for incidents in the field)</p> <p>NOTE: Due to the time sensitive nature of administration of these antidotes it may be necessary to use some of the medications in the Goleta Valley EMS cache in the hospital settings in southern Santa Barbara.</p> <p>You will likely need to deploy items from the EMS cache to the scene AND items from the hospital or EMS cache to the receiving hospitals.</p> <p>Note: In order to comply with CDC, DEA and internal procedures concerning controlled</p>			
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	<p>substances, for security purposes a custodial agent may elect to call the Sheriff's Communications Center back to verify the validity of the request.</p>			
4.	<p>Based on location and access on scene, EMS duty officer and IC determine the most appropriate EMS and hospital caches to deploy.</p> <p>Note: Each EMS cache can treat up to 450 patients in the field. If more than 450 patients are to be treated in the field, BOTH EMS caches must be deployed.</p> <p>Note: The hospital cache can treat 1,000 patients.</p> <p>Based primarily on the location of the incident, but also taking into account traffic patterns and any other relevant information, EMS duty officer or IC will determine if the Marian West cache or the GVCH cache is most appropriate for deployment to the scene.</p> <p><u>Receiving hospitals will receive medications from the HOSPITAL cache or the Goleta Valley EMS cache.</u></p> <p>Note: You will need to make multiple separate transportation arrangements to move Chempack resources to the scene and to the receiving hospital(s).</p>			



5.	<p>SB County Communication Center to make code 3 transportation arrangements for:</p> <ul style="list-style-type: none"> • EMS Chempack cache to the staging area indicated by the authorized requestor • Hospital Chempack to receiving hospitals. <p>Note: Due to proximity, in some cases antidotes from the EMS Chempack at GVCH will need to be used at south county hospitals.</p> <p>Note: Time is of critical importance. 60 minute window to administer nerve agent antidotes.</p> <ul style="list-style-type: none"> • Consider all available public safety resources, the traffic situation and other incident-specific factors and use the resource or combination of resources necessary. • Remember, if the entire EMS cache(s) and the hospital cache are deployed, separate transportation will be needed for each. • Relay ETA to the requestor when available. <p>NOTE: Items may be removed from the wheeled Chempack container and transported separately in vehicles. The EMS cache will fit into the backseat of a passenger vehicle.</p> <p><i>For out-of county incidents, transportation arrangements are the responsibility of the requestor. In the interest of public safety, dispatch personnel will take all necessary action to assist out-of-county requestors in coordinating transportation using any resources available within the county including those from cities and CHP.</i></p>			
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	<p>Transportation resources for Marian West Hospital (hospital and EMS) caches:</p> <ul style="list-style-type: none"> • Santa Maria Fire (consider their level of involvement and commitment of resources if the incident is occurring within their jurisdiction – if they are heavily involved in response and suppression activities, consider another alternative) • Sheriff • Santa Barbara County Fire or Santa Maria City Fire • AMR • Santa Maria PD • CHP • Helicopter • CALSTAR • Other code-3 equipped law enforcement, fire or EMS asset • Other air assets <p>Air transport helispot options for Marian West:</p> <p>Have the helicopter meet the ground unit at Marian Hospital’s helispot.</p> <p>If air transport is arranged, be sure to coordinate helispot security and ground transportation at the receiving end.</p> <p>Transportation resources for GVCH (EMS) cache:</p> <ul style="list-style-type: none"> • Sheriff • Santa Barbara County Fire • AMR • CHP • Santa Barbara PD • helicopter • CALSTAR • Other air assets • Other code-3 equipped law enforcement, 			
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	<p>fire or EMS asset</p> <p><i>Air transport helispot for GVCH:</i></p> <p>Contact Airport Patrol via SBPD. Have helicopter meet the ground unit at the Santa Barbara Airport at Signature Air.</p> <p>If air transport is arranged, be sure to coordinate helispot security and tarmac access via Airport Patrol. Arrange ground transportation to scene or hospital at the receiving end.</p> <p>Inform IC on scene and receiving hospital of ETA of Chempack assets.</p>			
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6.	The EMS Duty Officer will notify the Regional Disaster Medical Health Coordinator (RDMHC) by calling 562-347-1500 (Main) or 949-981-2865 (c)			
7.	Notify all Santa Barbara, Ventura, and SLO County hospitals and other REDDINet users via REDDINet memo. Include estimated number of victims and which hospitals will receive the HOSPITAL CHEMPACK medications.			
8.	Request that hospitals receiving Chempack medications coordinate security with local law enforcement to assure safeguarding of the cache and protecting the facility and its staff from any crowd control issues. If the venue agency is unable to fill the request, request officers from other agencies on a mutual aid basis.			

Reminders

- ★ ***Time is of the essence. The medications must reach the patients and/or affected first responders within 60 minutes! Take action quickly, particularly when arranging transportation. If one transportation resource alternative cannot rapidly commit, immediately begin looking for another. Be careful not lose too much time waiting for several call backs.***
- ★ Other nearby counties with EMS CHEMPACK caches include: Ventura and San Luis Obispo.

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