

PROTOCOL CHANGELOG

2026 – 2027 Protocol Updates



Global Updates

None

Section I – Standards / Glossary / Abbreviations

S-100 Patient Management Standards

- **BLS/ALS Transport Criteria – 100.2**
 - **Miscellaneous**
 - **Added:** Obstetrical emergencies (e.g., active labor or suspected preeclampsia/eclampsia)

S-101 Glossary of Terms

- **Perilaryngeal Airway Adjunct (PAA) Options**
 - **Removed:** Retroglottic airway: The “King Airway” is the only such airway approved for prehospital use in San Diego County

Section II – Inventory / Medication Lists / PDC / Skills List

S-103 BLS/ALS Ambulance Inventory

- **BLS Requirements**
 - **Added:** Oxygen saturation monitoring device with a par level of 1 for adult probe and 1 for pediatric/infant probe
- **BLS Requirements – Optional Items**
 - **Removed:** Oxygen saturation monitoring device with a par level of 1 for adult probe and 1 for pediatric/infant probe
- **ALS Requirements – Airway Adjuncts**
 - **Removed:** Retroglottic airway (King Airway: sizes 3, 4, 5)
 - **Previous:** Stylet – 6 and 14 french, Adult
 - **Revision:** Stylet – 14 french
- **ALS Requirements – Monitoring**
 - **Removed:** Oxygen saturation monitoring device with a par level of 1 for adult probe and 1 for pediatric/infant probe
- **ALS Requirements – Replaceable Medications**
 - **Added:** Magnesium sulfate – 5 gm/10 mL (vial or prefilled syringe) with a par level of 1

S-104 Skills List

- **Color Legend – Yellow**
 - **Previous:** Authorized by LEMSA Medical Director per Title 22, Division 9, Chapter 3.1, § 100066.02 or by California EMSA-approved LOSOP^S
 - **Revision:** Authorized by LEMSA Medical Director per Title 22, Division 9, Chapter 3.1, § 100066.02/§100066.04^L or by California EMSA-approved LOSOP^S
- **Bougie – Indications**
 - **Previous:** Assist with intubation
 - **Revision:** Assist with endotracheal intubation
- **CPAP – Indications**
 - **Previous:**
 - Respiratory Distress: Suspected CHF/cardiac origin
 - Respiratory Distress: Suspected non-cardiac origin
 - **Revision:** Respiratory distress (suspected CHF/cardiac origin or non-cardiac origin)
- **CPAP – Notes**
 - **Added:** EMT/AEMT: May perform CPAP when directed by an on-scene paramedic after assessment determines a clinical need.
 - **Added:** Some patients may find it difficult to tolerate CPAP. Coaching during CPAP application can enhance patient understanding, reduce anxiety, and improve mask tolerance. In many cases, patient anxiety is transient; however, some patients experience severe agitation that prevents effective oxygenation. If the patient remains unable to tolerate CPAP, consider administration of low-dose midazolam. Dose selection should be guided by patient's estimated weight and severity of agitation. Monitor the patient closely for ability to maintain airway.
- **Intubation – ET / Stomal – Notes**
 - **Previous:** When moving an intubated patient, apply C-collar prior to moving to minimize head movement and potential ET dislodgement.
 - **Revision:** Apply C-collar prior to moving patient to minimize head movement and potential ET dislodgement.
- **Intubation – Perilaryngeal Airway Adjuncts (PAA) Supraglottic Airway (i-gel)**
 - **Removed:** King Airway
 - **Previous:** When moving an intubated patient, apply C-collar prior to moving to minimize head movement and potential PAA dislodgement.

- **Revision:** Apply C-collar prior to moving patient to minimize head movement and potential ET dislodgement.
- **Nasogastric / Orogastric Tube – Notes**
 - **Previous:** If NG tube needed in a patient with a King Airway/i-gel, insertion should be via the suction/gastric port, if available.
 - **Revision:** If NG tube needed in a patient with an i-gel, insertion should be via the suction/gastric port, if available.
- **Obstetrical Maneuvers – Notes**
 - **Added:** If cord wrapped too tightly, perform somersault maneuver
 - **Previous:** Clamp and cut cord, if wrapped too tightly
 - **Revision:** If unable to slip cord over the head and off neck and somersault maneuver unsuccessful, clamp and cut cord.
 - **Added:** If shoulder still does not deliver, add suprapubic pressure
- **Positive End-Expiratory Pressure (PEEP) – Notes**
 - **Previous:** EMT/AEMT: May perform BVM ventilations with PEEP valve in place, but may not adjust settings.
 - **Revision:** EMT/AEMT: May perform BVM ventilations with PEEP valve in place; may adjust settings when directed by an on-scene paramedic.
- **Pulse Oximetry – Notes**
 - **Added:** A pulse oximeter should be placed on newborn's right hand or wrist as soon as possible when receiving respiratory support or supplemental oxygen.
- **Prehospital Stroke Screening and Severity Scales – Indications**
 - **Previous:** All patients with suspected Stroke/TIA
 - **Revision:** All patients with suspected TIA or stroke
- **Vascular Access – Indwelling Devices – Contraindications**
 - **Previous:** (i.e., port-a-cath)
 - **Revision:** (e.g., port-a-cath)
- **Vascular Access – Indwelling Devices – Notes**
 - **Added:** Indwelling device contains concentrated dose of heparin. Aspirate 5 mL prior to infusion.
- **Vascular Access – Percutaneous Dialysis Catheter Access (Vascath) – Notes**
 - **Previous:** Vascath contains concentrated dose of heparin which must be aspirate PRIOR to infusion.
 - **Revision:** Dialysis catheter contains concentrated dose of heparin. Aspirate 5 mL prior to infusion.

P-115 Medication list

- **Color Legend – Yellow**
 - **Previous:** Authorized by LEMSA Medical Director per Title 22, Division 9, Chapter 3.1, § 100066.02^L or by California EMSA-approved LOSOP^S
 - **Revision:** Authorized by LEMSA Medical Director per Title 22, Division 9, Chapter 3.1, § 100066.02/§100066.04^L or by California EMSA-approved LOSOP^S
- **Disclaimer**
 - **Previous:** This document contains the authorized medications for EMT/AEMT/Paramedics to administer when on-duty as part of the organized EMS system, while at the scene of a medical emergency or during transport, or during interfacility transfer.
 - **Revision:** This document contains the authorized medications for EMT/AEMT/Paramedics or supervised EMT/AEMT/Paramedic students to administer when on-duty as a part of the organized EMS system, while at the scene of a medical emergency or during transport, or during interfacility transfer. This document is not comprehensive, refer to the individual treatment protocols for additional information.
- **Dextrose – Adult Dose**
 - **Previous:** Dextrose
 - **Revision:** D₁₀
- **Dextrose – Notes**
 - **Added:** If D₁₀ not available, can dilute D₅₀ to make D₁₀.
 - **Added:**
 - **Mixing Instructions (D₅₀ to D₁₀)**
 - Remove 50 mL normal saline (NS) from the 250 mL NS bag
 - Add 50 mL of D₅₀ (25 gm/50 mL) to 200 mL NS bag
 - The mixture now has 25 gm/250 mL of dextrose at 10% concentration
- **Fentanyl – Adult Dose**
 - **Previous:** IV: Fentanyl up to 100 mcg IV. MR up to 50 mcg IV q5 min x2. Maximum total dose 200 mcg IV
 - **Revision:**
 - **IV:**
 - Up to 100 mcg IV
 - MR up to 50 mcg IV q5 min x2
 - Maximum total dose 200 mcg IV
 - **Previous:** IN: Up to 50 mcg IN q15 min x2. 3rd dose fentanyl up to 50 mcg IN

- **Revision:**
 - IN:
 - Up to 50 mcg IN
 - MR up to 50 mcg IN q15 min x2
 - Maximum total dose 150 mcg IN
- **Ketamine – Contraindications**
 - **Added:** <15 years of age
 - **Added:** GCS <15
 - **Previous:** Pregnancy with pain from active labor
 - **Revision:** Pregnant patient
 - **Added:** Known or suspected alcohol or drug intoxication
- **Ketamine – Adult dose**
 - **Added:** Maximum total dose 60 mg IV.
 - **Added:** Maximum total dose 100 mg IN.
- **Ketamine – Notes**
 - **Previous:** Not authorized for use in dissociative dose ranges. To reduce the risk for dissociative states, maximum dose is not to exceed 60 mg IV or 100 mg IN.
 - **Revision:** Not authorized for use in dissociative dose ranges. To reduce the risk for dissociative states, maximum total dose administered is not to exceed 60 mg IV or 100 mg IN.
- **Magnesium Sulfate**
 - **Added:** Magnesium sulfate as a medication page
- **Midazolam – Indications**
 - **Previous:** Management of seizures and eclampsia, sedation pre-cardioversion/pre-pacing, unable to tolerate CPAP, intubated patients with agitation, and agitated/combatative patients
 - **Revision:** Management of seizures, sedation pre-cardioversion/pre-pacing, unable to tolerate CPAP, intubated patients with agitation, and agitated/combatative patients
 - **Removed:** S-133
 - **Removed:** S-166
 - **Added:** S-178
- **Midazolam – Adult Dose**
 - **Previous:** Seizure
 - **Revision:** Status epilepticus
 - **Added:** IM midazolam is the first line route of administration if an IV not already established
 - **Previous:** Patients ≥40 kg: midazolam 10 mg IM
 - **Revision:** Midazolam 10 mg IM/IN, MR x1 in 5 min

- **Removed:** Patients <40 kg: midazolam 0.2 mg/kg IM
- **Previous:** If vascular access present, midazolam 0.2 mg/kg IV/IO to max dose of 5 mg, MR x1 in 10 min. Max 10 mg total, d/c if seizure stops
- **Revision:** If vascular access present, midazolam 5 mg slow IV/IO, MR x1 in 5 min
- **Removed:** Eclampsia indication
- **Previous:** Behavioral
- **Revision:** Psychiatric/behavioral emergencies
- **Midazolam – Pediatric Dose**
 - **Previous:** Seizure
 - **Revision:** Status epilepticus
 - **Added:** IM midazolam is the first line route of administration if an IV not already established
 - **Previous:** Midazolam IM per drug chart
 - **Revision:** Midazolam IM/IN per drug chart, MR x1 in 5 min
 - **Previous:** If vascular access present, midazolam IV/IO per drug chart, MR x1 in 10 min
 - **Revision:** If vascular access present, midazolam slow IV/IO per drug chart, MR x1 in 5 min
 - **Added:**
 - Intubated with agitation
 - Midazolam per drug chart IM/IN/IV/IO, MR x1 in 5-10 min
 - **Previous:** Behavioral
 - **Revision:** Psychiatric/behavioral emergencies

Section III – Adult Treatment Protocols

S-121 Airway Obstruction

- **BLS**
 - **Previous:** Abdominal thrusts
 - **Revision:** 5 back blows (slaps), followed by 5 abdominal thrusts
 - **Previous:** Use chest thrusts in obese or pregnant patients
 - **Revision:** For obese or pregnant patients, 5 back blows (slaps), followed by 5 chest thrusts
 - **Added:** Repeat until object is expelled or patient becomes unconscious

S-122 Allergic Reaction / Anaphylaxis

- **BLS**
 - **Previous:** Assist patient to self-medicate own prescribed epinephrine auto-injector or albuterol MDI once only. BH contact required for additional dose(s)
 - **Revision:** Assist patient to self-medicate own prescribed epinephrine auto-injector and/or albuterol MDI once only. BH contact required for additional dose(s)

S-123 Altered Neurologic Function (Non-Traumatic)

- **ALS**
 - **Previous:** Dextrose 25 gm IV if BS <60 mg/dL[Ⓐ]
 - **Revision:** D₁₀ 25 gm IV if BS <60 mg/dL[Ⓐ]
 - **Previous:** Status epilepticus (generalized, ongoing, and recurrent seizures without lucid interval)
 - **Revision:** Status epilepticus (actively seizing ≥5 min or ≥2 seizures without lucid interval)¹
 - **Added:** Footnote of “Includes seizure time prior to arrival of EMS clinicians”
 - **Added:** IM midazolam is the first line route of administration if an IV not already established
 - **Previous:** Patients ≥40 kg: midazolam 10 mg IM
 - **Revision:** Midazolam 10 mg IM/IN, MR x1 in 5 min
 - **Removed:** Patients <40 kg: midazolam 0.2 mg/kg IM
 - **Previous:** Midazolam 0.2 mg/kg IV/IO to max dose of 5 mg, MR x1 in 10 min. Max 10 mg total, d/c if seizure stops
 - **Revision:** Midazolam 5 mg slow IV/IO, MR x1 in 5 min
 - **Removed:**
 - Partial seizure lasting ≥5 min (includes seizure time prior to arrival of prehospital provider)
 - Midazolam 0.2 mg/kg IN/IM/IV/IO to max dose of 5 mg, MR x1 in 10 min. Max 10 mg total, d/c if seizure stops
 - **Previous:** Eclamptic seizure of any duration
 - **Revision:** Eclamptic seizure
 - **Previous:** Treat per Obstetrical Emergencies / Newborn Deliveries (S-133)
 - **Revision:** Treat seizure per Obstetrical Emergencies / Newborn Deliveries (S-133)

S-126 Discomfort / Pain of Suspected Cardiac Origin

- **ALS**
 - **Previous:** If BP refractory to second fluid bolus
 - **Revision:** If BP refractory to second fluid bolus or rales present

S-127 CPR / Arrhythmias

- **ALS – Unstable Bradycardia**
 - **Previous:** If capture occurs and SBP \geq 100 mmHg, treat per Pain Management Protocol (S-141)
 - **Revision:** If capture occurs and experiencing pain from pacing, treat per Pain Management Protocol (S-141)
- **ALS – Asystole / Termination of Resuscitation**
 - **Previous:** §Applies to cardiac arrests of presumed cardiac origin. Excludes drowning, hypothermia, trauma, and electrocution.
 - **Revision:** §Applies to cardiac arrests of presumed cardiac origin. Excludes drowning, hypothermia, and electrocution. For traumatic arrests, treat per Adult Traumatic Cardiac Arrest algorithm in S-139 Trauma.

S-133 Obstetrical Emergencies / Newborn Deliveries

- **ALS – Predelivery**
 - **Added:**
 - Preeclampsia (elevated blood pressure) at \geq 20 weeks gestation or up to 6 weeks postpartum
 - IF SBP \geq 140 mmHg with any of the following:
 1. Severe Headache
 2. Vision changes including blurred vision, spots/floaters, loss of vision¹
 3. Right upper quadrant or epigastric abdominal pain
 - Magnesium sulfate 4 gm in 100 mL of NS over 20 min IV/IO

OR

 - For asymptomatic patients with SBP \geq 160 mmHg on at least two consecutive readings over \geq 15 min
 - Magnesium sulfate 4 gm in 100 mL of NS over 20 min IV/IO
BHPO
 - **Previous:** Eclampsia (seizures)

- **Revision:** Eclampsia (seizure) at ≥ 20 weeks gestation or up to 6 weeks postpartum
- **Removed:** Midazolam IN/IM/IV/IO to a max dose of 5 mg (d/c if seizure stops), MR x1 in 10 min. Max 10 mg total.
- **Added:**
 - Magnesium sulfate 4 gm in 100 mL of NS over 20 min IV/IO
 - If seizure lasts ≥ 5 minutes²
 - Treat seizure per Altered Neurologic Function (Non-Traumatic) (S-123) for status epilepticus then administer magnesium sulfate, if not already initiated.
- **Added:** Footnote of “These symptoms are often a precursor to seizure.”
- **BLS and ALS – Delivery – Routine Delivery**
 - **Previous:** Wait 60 sec after delivery, then clamp and cut cord between clamps
 - **Revision:** Wait at least 60 sec after delivery, then clamp and cut cord between clamps
- **BLS and ALS – Delivery – Nuchal Cord**
 - **Added:** If cord wrapped too tightly, perform somersault maneuver
 - **Previous:** Clamp and cut cord, if wrapped too tightly
 - **Revision:** If unable to slip cord over the head and off neck and somersault maneuver unsuccessful, clamp and cut cord
- **BLS and ALS – Delivery – Shoulder Dystocia**
 - **Added:** If shoulder still does not deliver, add suprapubic pressure
- **BLS and ALS – Delivery – Eclampsia (seizures)**
 - **Removed:** Indication removed
- **ALS – Mother Post-Delivery**
 - **Previous:** Eclampsia (seizures)
 - **Revision:** Eclampsia (seizure) at ≥ 20 weeks gestation or up to 6 weeks postpartum
 - **Removed:** Midazolam IN/IM/IV/IO to a max dose of 5 mg (d/c if seizure stops), MR x1 in 10 min. Max 10 mg total.
 - **Added:**
 - Magnesium sulfate 4 gm in 100 mL of NS over 20 min IV/IO
 - If seizure lasts ≥ 5 minutes³
 - Treat seizure per Altered Neurologic Function (Non-Traumatic) (S-123) for status epilepticus then administer magnesium sulfate, if not already initiated.
- **BLS and ALS – Neonatal Post-Delivery**
 - **Previous:** If placing pulse oximeter, use newborn’s right hand
 - **Revision:** Place pulse oximeter on newborn’s right hand or wrist
 - **Previous:** O₂ saturation on newborn’s right hand PRN

- **Revision:** O₂ saturation on newborn’s right hand or wrist
- **Previous:** Newborn HR ≥100 with respiratory distress or central cyanosis
- **Revision:** Newborn HR ≥100 with respiratory distress, central cyanosis, or O₂ saturation less than the Target Oxygen Saturation (Table)
- **Added:** Target Oxygen Saturation Table

Target Oxygen Saturation	
Min after Birth	SpO ₂
2 min	65%-70%
3 min	70%-75%
4 min	75%-80%
5 min	80%-85%
10 min	85%-95%

- **Previous:** For persistently poor respiratory rate/effort, or cyanosis despite correct BVM technique, add high-flow O₂ 15 L/min to BVM
- **Revision:** For persistently poor respiratory rate/effort, cyanosis, or O₂ saturation less than the Target Oxygen Saturation (table) despite correct BVM technique, add high-flow O₂ 15 L/min to BVM

S-135 Existing Devices and Medications

- **ALS**
 - **Previous:** Assist with administration of physician-prescribed self-administered emergency medication [Ⓢ] [e.g., hydrocortisone (Solu-Cortef[®]) for Congenital Adrenal Hyperplasia]
 - **Revision:** Assist with administration of physician-prescribed self-administered emergency medication [Ⓢ] [e.g., hydrocortisone (Solu-Cortef[®]) for adrenal insufficiency]

S-139 Trauma

- **ALS**
 - **Previous:** Do not administer epinephrine
 - **Revision:** Do not administer epinephrine if suspected hemorrhagic etiology
- **Adult Traumatic Cardiac Arrest Algorithm**
 - **Added:** Asphyxiation (e.g., strangulation or hanging) – Treat per Protocol S-127

S-141 Pain Management

- **ALS – Fentanyl (IN Dosing)**
 - **Previous:**
 - Up to 50 mcg IN q15 min x2
 - 3rd dose fentanyl up to 50 mcg IN
 - **Revision:**
 - Up to 50 mcg IN
 - MR up to 50 mcg IN q15 min x2
 - Maximum total dose 150 mcg IN
 - **Removed:** 3rd dose fentanyl up to 50 mcg IN
- **ALS – Ketamine (IV Dosing)**
 - **Added:** Maximum total dose 60 mg IV
- **ALS – Ketamine (IN Dosing)**
 - **Added:** Maximum total dose 100 mg IN

Section IV – Pediatric Treatment Protocols

S-160 Airway Obstruction

- **BLS**
 - **Previous:** Abdominal thrusts
 - **Revision:** 5 back blows (slaps), followed by 5 abdominal thrusts
 - **Removed:** For obese or pregnant patients, perform chest thrusts
 - **Previous:** For infants <1 year, perform 5 back blows and 5 chest thrusts, MR PRN
 - **Revision:** For infants <1 year, perform 5 back blows (slaps), followed by 5 chest thrusts
 - **Added:** Repeat until object is expelled or patient becomes unconscious

S-161 Altered Neurologic Function (Non-Traumatic)

- **ALS**
 - **Previous:** Status epilepticus (generalized, ongoing, and recurrent seizures without lucid interval)
 - **Revision:** Status epilepticus (actively seizing ≥ 5 min or ≥ 2 seizures without lucid interval)¹
 - **Added:** Footnote of “Includes seizure time prior to arrival of EMS clinicians”

- **Added:** IM midazolam is the first line route of administration if an IV not already established
- **Previous:** Midazolam IM per drug chart
- **Revision:** Midazolam IM/IN per drug chart, MR x1 in 5 min
- **Previous:** Midazolam IV/IO per drug chart, MR x1 in 10 min
- **Revision:** Midazolam slow IV/IO per drug chart, MR x1 in 5 min
- **Removed:**
 - Partial seizure lasting ≥ 5 min (includes seizure time prior to arrival of prehospital provider)
 - Midazolam IN/IM/IV/IO per drug chart, MR x1 in 10 min
- **Previous:** Eclamptic seizure of any duration
- **Revision:** Eclamptic seizure
- **Previous:** Treat per Obstetrical Emergencies / Newborn Deliveries (S-133)
- **Revision:** Treat seizure per Adult Obstetrical Emergencies / Newborn Deliveries (S-133)

S-162 Allergic Reaction / Anaphylaxis

- **BLS**
 - **Previous:** Assist patient to self-medicate own prescribed epinephrine auto-injector or albuterol MDI once only. BH contact required for additional dose(s)
 - **Revision:** Assist patient to self-medicate own prescribed epinephrine auto-injector and/or albuterol MDI once only. BH contact required for additional dose(s)

S-166 Obstetrical Emergencies / Newborn Deliveries

- **ALS – Predelivery**
 - **Added:**
 - Preeclampsia (elevated blood pressure) at ≥ 20 weeks gestation or up to 6 weeks postpartum
 - IF SBP ≥ 140 mmHg with any of the following:
 4. Severe Headache
 5. Vision changes including blurred vision, spots/floaters, loss of vision¹
 6. Right upper quadrant or epigastric abdominal pain
 - Magnesium sulfate 4 gm in 100 mL of NS over 20 min IV/IO

OR

- For asymptomatic patients with SBP \geq 160 mmHg on at least two consecutive readings over \geq 15 min
 - Magnesium sulfate 4 gm in 100 mL of NS over 20 min IV/IO BHPO
- **Previous:** Eclampsia (seizures)
- **Revision:** Eclampsia (seizure) at \geq 20 weeks gestation or up to 6 weeks postpartum
- **Removed:** Midazolam IN/IM/IV/IO to a max dose of 5 mg (d/c if seizure stops), MR x1 in 10 min. Max 10 mg total.
- **Added:**
 - Magnesium sulfate 4 gm in 100 mL of NS over 20 min IV/IO
 - If seizure lasts \geq 5 minutes²
 - Treat seizure per Altered Neurologic Function (Non-Traumatic) (S-123) for status epilepticus then administer magnesium sulfate, if not already initiated.
- **Added:** Footnote of “These symptoms are often a precursor to seizure.”
- **BLS and ALS – Delivery – Routine Delivery**
 - **Previous:** Wait 60 sec after delivery, then clamp and cut cord between clamps
 - **Revision:** Wait at least 60 sec after delivery, then clamp and cut cord between clamps
- **BLS and ALS – Delivery – Nuchal Cord**
 - **Added:** If cord wrapped too tightly, perform somersault maneuver
 - **Previous:** Clamp and cut cord, if wrapped too tightly
 - **Revision:** If unable to slip cord over the head and off neck and somersault maneuver unsuccessful, clamp and cut cord
- **BLS and ALS – Delivery – Shoulder Dystocia**
 - **Added:** If shoulder still does not deliver, add suprapubic pressure
- **BLS and ALS – Delivery – Eclampsia (seizures)**
 - **Removed:** Indication removed
- **ALS – Mother Post-Delivery**
 - **Previous:** Eclampsia (seizures)
 - **Revision:** Eclampsia (seizure) at \geq 20 weeks gestation or up to 6 weeks postpartum
 - **Removed:** Midazolam IN/IM/IV/IO to a max dose of 5 mg (d/c if seizure stops), MR x1 in 10 min. Max 10 mg total.
 - **Added:**
 - Magnesium sulfate 4 gm in 100 mL of NS over 20 min IV/IO
 - If seizure lasts \geq 5 minutes³

- Treat seizure per Altered Neurologic Function (Non-Traumatic) (S-123) for status epilepticus then administer magnesium sulfate, if not already initiated.
- **BLS and ALS – Neonatal Post-Delivery**
 - **Previous:** If placing pulse oximeter, use newborn’s right hand
 - **Revision:** Place pulse oximeter on newborn’s right hand or wrist
 - **Previous:** O₂ saturation on newborn’s right hand PRN
 - **Revision:** O₂ saturation on newborn’s right hand or wrist
 - **Previous:** Newborn HR ≥100 with respiratory distress or central cyanosis
 - **Revision:** Newborn HR ≥100 with respiratory distress, central cyanosis, or O₂ saturation less than the Target Oxygen Saturation (Table)
 - **Added:** Target Oxygen Saturation Table

Target Oxygen Saturation	
Min after Birth	SpO ₂
2 min	65%-70%
3 min	70%-75%
4 min	75%-80%
5 min	80%-85%
10 min	85%-95%

- **Previous:** For persistently poor respiratory rate/effort, or cyanosis despite correct BVM technique, add high-flow O₂ 15 L/min to BVM
- **Revision:** For persistently poor respiratory rate/effort, cyanosis, or O₂ saturation less than the Target Oxygen Saturation (table) despite correct BVM technique, add high-flow O₂ 15 L/min to BVM

S-169 Trauma

- **ALS**
 - **Previous:** Do not administer epinephrine
 - **Revision:** Do not administer epinephrine if suspected hemorrhagic etiology
- **Pediatric Traumatic Cardiac Arrest Algorithm**
 - **Added:** Asphyxiation (e.g., strangulation or hanging) – Treat per Protocol S-163

S-178 Existing Devices and Medications

- **Added:** New pediatric protocol to align with S-135