# Operations Subcommittee
**of the Emergency Medical Care Committee**

## Meeting Agenda:
## 9 A.M.,Thursday December 1st 2022
## Location: SLOEMSA Conference Room
## 2995 McMillan Ave, STE #178, San Luis Obispo

**Members**
Jay Wells, *Sheriff's Department, CHAIR*
Tim Benes, *Ambulance Providers*
Scotty Jalbert, *Office of Emergency Services*
Aften Porras, *Med-Com*
Adam Forrest, M.D., *Hospitals*
Chief Steve Lieberman, *Fire Service*
Kris Strommen, *Ambulance Providers*
Rob Jenkins*, Fire Service*
Lisa Epps, *Air Ambulance Providers*
Aaron Hartney, *Air Ambulance Providers*
Gerry Perez, *CHP*
Chief Keith Aggson, *Fire Service*
*TBD*, *Law Enforcement*
Chief Casey Bryson, *Fire Service*
Roger Colombo, *Field Provider-Paramedic*

**Staff**
STAFF LIAISON, David Goss*, EMS Coordinator*
Vince Pierucci, *EMS Division Director*
Thomas Ronay, M.D., *Medical Director*
Rachel Oakley, *EMS Coordinator*
Ryan Rosander, *EMS Coordinator*
Sara Schwall, *Administrative Assistant*

| AGENDA | ITEM | LEAD |
|---|---|---|
| Call to Order | Introductions<br><br>Public Comment | Jay Wells |
| Summary Notes | Review of Summary Notes December 3rd, 2021 | |
| Discussion | Supraglottic Airway Implementation<br><br>Multi-Casualty Incident Policy Re-work Update | David Goss |
| Adjourn | Declaration of Future Agenda Items<br>- MCI Packet Release and Review<br><br>Next Meeting Date: February 2nd, 2023, 9:00 A.M.<br>Location: SLOEMSA Conference Room<br>2995 McMillan Ave, STE #178, San Luis Obispo | Jay Wells |

**Draft**

# Operations Subcommittee of the Emergency Medical Care Committee

**Meeting Minutes**
**Thursday, December 2nd , 2021**

| Members | | Staff | |
|---|---|---|---|
| ☒ | CHAIR Jay Wells, Sheriff's Department | ☒ | Vince Pierucci., EMS Division Director |
| ☒ | Mike McDonough, Ambulance Providers | ☐ | Thomas Ronay,MD, Medical Director |
| ☒ | Scotty Jalbert, OES | ☒ | Rachel Oakley, EMS Coordinator |
| ☒ | Rob Jenkins, Fire Service | ☒ | Mike Groves, EMS Coordinator |
| ☒ | Adam Forrest, MD, Hospitals | ☒ | Kyle Parker, EMS Coordinator |
| ☒ | Chief Steve Lieberman, Fire Service South County | ☐ | Amy Mayfield, EMS Administrative Assistant |
| ☒ | Joe Piedalue, Ambulance Providers | | |
| ☒ | Lisa Epps, Air Ambulance Providers (Mercy Air) | | |
| ☒ | Chief Casey Bryson, Fire Service North County | | |
| ☐ | Steve Neumann, CHP | | |
| ☒ | Chief Keith Aggson, Fire Service, Coastal | Guests: Luke Riley, Mercy Air | |
| ☒ | Roger Colombo, Field Provider, Paramedics | | |
| ☒ | Rhonda Durian, MedCom | | |
| ☐ | Aaron Hartney, Air Ambulance Providers | | |
| ☐ | Rob Jenkins Fire Service | | |
| ☐ | Vacant, Law Enforcement | | |

| AGENDA ITEM / DISCUSSION | ACTION / FOLLOW-UP |
|---|---|
| ***CALL TO ORDER*** | |
| **Introductions** | 09:00am |
| **Public Comment – None** | |
| ***APPROVAL OF MINUTES – Approved*** | |
| ***ACTION / DISCUSSION ITEMS*** | |
| **Amendments to Policy #350 MICN Initial Authorization:**<br><br>J. Wells: Recommendation to approve.<br>S. Lieberman: Waive time requirements for accredited paramedics.<br>R. Oakley: 2 Years<br>R. Colombo: FTO required at MICN class?<br>K. Parker: MICN class goes over system extensively. FTO shouldn't be needed.<br>R. Jenkins: Motion<br>R. Colombo: Second<br>J. Wells: Move to EMCC. | R. Oakley<br><br>K. Parker |
| **Helicopter Review:**<br><br>Data review – provided by ELL. Cancelation rates, mode of call, type of call, responding air provider, transported, destinations.<br>- Briefly discussed French Hospital STEMI calls/ treatment, that didn't meet time criteria<br>R.Jenkins: 36% didn't meet criteria when helicopter landed on scene. | M. Groves |
| **MICN Policy**<br>Need names for involvement in MCI workgroup._____ | V. Pierucci |
| **COVID / CHADOC Update:**<br><br>V. Pierucci: CHADOC still active. Switching operations back to department. Working on a hybrid method to get back to normal jobs. Case rates in a holding pattern. 63% Vaccine rate, increase of .5% a week. Omicron is a new variable - unsure of re-precautions. Strain appears to be more transmissible.<br><br>Working on afteraction alongside OES/Jalbert_____ | V. Pierucci |

| AGENDA ITEM / DISCUSSION | ACTION / FOLLOW-UP |
|---|---|
| **Approval of Minutes from October**<br><br>R. Jenkins – Motion<br>R. Colombo – Second<br>0 opposed<br>Approved<br><br>**Items Moving Forward**<br><br>M. Groves: Helicopter **data =** standing item.<br>R. Jenkins: Update to scene management. Part of MCI Workgroup??? | |
| ***ADJOURN*** | |
| Next Meeting: February 3, 2022, 09:00 A.M.<br>Location: TBD (Virtual or In-Person) | |

COUNTY OF SAN LUIS OBISPO HEALTH AGENCY
PUBLIC HEALTH DEPARTMENT
**Penny Borenstein, MD, MPH** *Health Officer/Public Health Director*

| | |
|---|---|
| **MEETING DATE** | December 1st, 2022 |
| **STAFF CONTACT** | David Goss, EMS Coordinator<br>805.788.2514 dgoss@co.slo.ca.us |
| **SUBJECT** | SGA Implementation and MCI Update |
| **SUMMARY** | • SGA Implementation<br>- Brief outline of clinical implementation<br>- Cost for i-Gel<br>- Updated 205A List with i-Gel minimum requirement<br><br>• MCI Update<br>- Update on MCI Policy/Plan progress<br>- Current Timeline<br>- Subjects of MCI change/revision |
| **REVIEWED BY** | Vince Pierucci, Dr. Thomas Ronay, SLOEMSA Staff |
| **RECOMMENDED ACTION(S)** | Recommended SGA for Operations approval.<br>Move to EMCC Agenda for recommended approval. |
| **ATTACHMENT(S)** | Operations PowerPoint Presentation, Policy #205A, #602, #717, #718 |

# Operations Committee

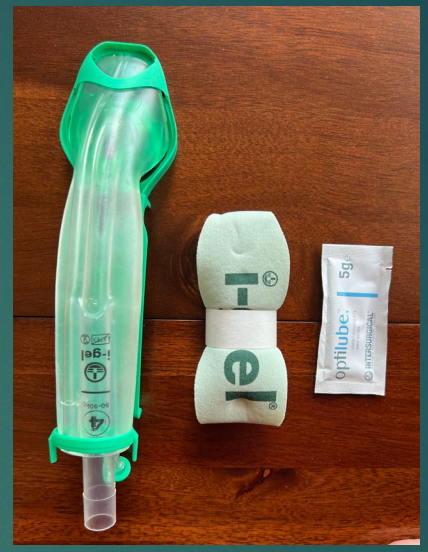
DECEMBER 1ST, 2022

# Supraglottic Airways

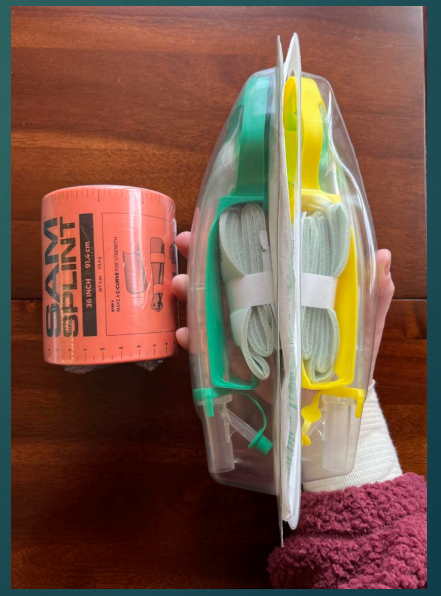
- Supraglottic Airways have received their recommendation and approval from Clinical Advisory Committee to have SGAs as an Option for Primary and backup to Endotracheal Intubation.
- Option for Primary: During initial visualization of the patient's airway if the ALS Provider determines the airway to be difficult (unable to visualize the patient's vocal cords), SGA will be indicated for use.
- Backup: If ET intubation efforts are unsuccessful after 1st attempt, continue with BLS airway and re-evaluate airway positioning before 2nd attempt while considering SGA usage. Following 2nd attempt, proceed to SGA usage.

# i-Gel SGA Cost and Details

- Supplied through BoundTree in individual packs.
- Three sizes will be approved:
  - Size 3: Small adult 30-60 kg
  - Size 4: Medium adult 50-90 kg
  - Size 5: Large Adult 90+ kg
- Each pack contains the i-Gel, securing strap, and lubrication.
- Each individual pack priced at $24.95.
- i-Gels have a 4-year expiration date.
- Upon recommendation from BoundTree, SLOEMSA shall require 1 size 3, 2 size 4, and 1 size 5 for each ALS unit/apparatus.
- Total cost for an adequately stocked unit: $99.80







# Updated #205 Attachment A

**County of San Luis Obispo**
**EMS Equipment and Supply List**

**Policy 205 - Attachment A**

| Description | Strength/Size | ALS Transport Minimum | ALS First Responder Minimum | ALS Special Use Medic Minimum | ALS Wildland Unit Minimum | BLS First Responder Minimum † *Elective skills as required* |
|---|---|---|---|---|---|---|
| | | | | | | |
| **AIRWAY** | | | | | | |
| Endotracheal tubes: | sizes-3.0, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0 | 1 each | 1 each | 1 each | 1 each | 0 |
| Laryngoscope handles, with extra batteries | | 2 | 2 | 1 | 1 | 0 |
| Laryngoscope blades: | Miller # 0, 1, 2, 3, 4 Macintosh # 1, 2, 3, 4 | 1 each | 1 each | 1 each | 1 each | 0 |
| i-Gel Supraglottic Airways | Size 3 and Size 5 | 1 each | 1 each | 1 each | 1 each | 0 |
| i-Gel Supraglottic Airways | Size 4 | 2 each | 2 each | 1 each | 1 each | 0 |

# Questions for SGA?

# Multi Casualty Incident Update

- Even though the MCI re-work has been delayed due to COVID-19, the SLOEMSA has been hard at work on generating the newly revised policy and plan.
- During its development, SLOEMSA has been working with Rob Jenkins of Cal Fire and other individual Stakeholder groups to improve individual functions of an MCI.
- A draft of the new MCI Policy/Plan will be brought to an MCI workgroup which includes personnel from multiple different agencies/organizations. This shall occur around January of 2023.
- Current goal of bringing the MCI policy/plan to the Operations Committee in February, EMCC in March, training in May, and implementation in July.

# Subjects of MCI Change/Revision

- Assimilate our current MCI management structure to be in line with traditional ICS.
- All decisions on the scene of an MCI shall be ran through the Incident Commander including ordering of resources and communication structure.
- Aligning our current policy to reflect the use of color-coded ribbons during initial triage up until movement to either a treatment area or collection point. On arrival to treatment/collection area, patients will then be given triage tags.
- Proper and easily seen identification of units/apparatus and crew on scene.
- Polling and initial patient notification to hospitals by EMSA-DO via ReddiNet.

# Any Additional Questions?

| Description | Strength/Size | ALS Transport Minimum | ALS First Responder Minimum | ALS Special Use Medic Minimum | ALS Wildland Unit Minimum | BLS First Responder Minimum † *Elective skills as required* |
|---|---|---|---|---|---|---|
| **MEDICATIONS** | | | | | | |
| Activated charcoal | 50 gm bottle (aqueous solution) | 1 | 1 | 0 | 0 | 0 |
| Adenosine | 6 mg/2 mL | 5 | 3 | 3 | 3 | 0 |
| Albuterol unit dose | 2.5 mg/3 mL solution | 4 | 2 | 2 | 2 | 0 |
| Aspirin | 81 mg nonenteric coated chewable | 1 bottle | 1 bottle | 4 tablets | 4 tablets | 1 bottle |
| Atropine | 1 mg/10 mL | 2 | 2 | 2 | 2 | 0 |
| Atropine | 8 mg multi-dose vial | 1 | 1 | 0 | 0 | 0 |
| Calcium Chloride 10% | 1 gm/10 mL | 1 | 1 | 0 | 0 | 0 |
| Dextrose 10% | 25 gm/250 mL bag | 2 | 2 | 1 | 1 | 0 |
| *Dextrose 50% | 25 gm/50 mL | 2 | 2 | 1 | 0 | 0 |
| Diphenhydramine | 50 mg/1 mL | 2 | 2 | 2 | 2 | 0 |
| Epinephrine | 1:1,000 1 mg/1 mL | 4 | 2 | 2 | 2 | 0 |
| †Epinephrine Auto-Injector | Pediatric and Adult | 0 | 0 | 0 | 0 | †1 each |
| Epinephrine | 1:10,000 1 mg/10 mL (10 mL preload) | 8 | 6 | 3 | 6 | 0 |
| Fentanyl | 100 mcg/2 mL | 2 | 2 | 2 | 2 | 0 |
| Glucagon | 1 mg/1 mL | 1 | 1 | 0 | 0 | 0 |
| Glucose gel | 15 gm | 2 tubes | 2 tubes | 2 tubes | 2 tubes | 2 tubes |
| Lidocaine 2% | 100 mg/ 5 mL | 6 | 4 | 3 | 3 | 0 |
| Midazolam | 5 mg/1 mL | 2 | 1 | 1 | 1 | 0 |
| Naloxone | 2 mg (vial or pre-load) | 2 | 2 | 2 | 2 | 0 |
| †Naloxone IN Kit | §2 mg pre-load and Atomizer | 0 | 0 | 0 | 0 | †2 |
| Nitroglycerine | SL tablets or spray | 2 | 1 | 1 | 1 | 0 |
| Nitro Paste 2% | 1 gm single dose packet | 3 | 3 | 0 | 0 | 0 |
| Ondansetron | 4 mg /2 mL injectable | 3 | 3 | 0 | 0 | 0 |
| | 4 mg dissolvable tablets | 3 | 3 | 1 | 1 | 0 |
| Sodium Bicarbonate | 50 mEq/50 mL | 2 | 2 | 0 | 0 | 0 |
| Tranexamic Acid (TXA) | 100 mg/1 mL 10 mL vial | 2 | 1 | 0 | 1 | 0 |
| **Because variations in medication supply occur, equivalent total dosage quantities may be substituted** | | | | | | |
| **Variations in the concentration of medications being stocked, due to medication supply shortages, must be approved by Medical Director** | | | | | | |
| ***Dextrose D50 is being phased out in favor of Dextrose D10** | | | | | | |
| **†Elective skills equipment required for participating agencies** | | | | | | |
| | | | | | | |
| **Alternate Medications to be Stocked ONLY with Medical Director Approval** | | | | | | |
| §Other pre-packaged single dose intranasal naloxone delivery devices that may be used with Medical Director Approval | | 0 | 0 | 0 | 0 | †2 |
| Diazepam (alternate to be stocked by order of Med Dir **ONLY**) | 10 mg | 2 | 1 | 1 | 1 | 0 |
| Morphine (alternate to be stocked by order of Med Dir **ONLY**) | 10 mg | 3 | 2 | 2 | 2 | 0 |
| | | | | | | |
| | | | | | | |

| Description | Strength/Size | ALS Transport Minimum | ALS First Responder Minimum | ALS Special Use Medic Minimum | ALS Wildland Unit Minimum | BLS First Responder Minimum † *Elective skills as required* |
|---|---|---|---|---|---|---|
| **IV SOLUTIONS/EQUIPMENT** | | | | | | |
| 0.9% Normal Saline | 1,000 mL bag (or equivalent total | 6 | 4 | 2 | 4 | 0 |
| 100 mL Saline Delivery Equipment | 0.9% NS 100 mL bag **OR** Burette | 2 | 1 | 0 | 0 | 0 |
| 0.9% Normal Saline | 10 mL Vials/Flush | 5 | 5 | 2 | 2 | 0 |
| IV Tubing | 60gtt/mL | 4 | 2 | 0 | 0 | 0 |
| IV Tubing | 10-20gtt/mL | 6 | 3 | 2 | 2 | 0 |
| IV Catheters | Sizes 14, 16, 18, 20, 22, 24 gauge | 2 each | 2 each | 2 each | 2 each | 0 |
| Syringes | Assorted - 1mL, 3mL, 6mL-20mL | 2 each | 2 each | 1 each | 1 each | 0 |
| Needles Assorted | - ½", 1", 1 ½" - 18-30 gauge | 2 each | 2 each | 2 each | 2 each | 0 |
| Intraosseous (IO) single needle device | (FDA approved) adult and pediatric | 1 each | 1 each | 1 each | 1 each | 0 |
| Tourniquets (for IV start) | | 2 | 2 | 2 | 2 | 0 |
| Saline locks | | 4 | 2 | 2 | 2 | 0 |
| Luer-Lock adaptors | (Not required but recommended for use with STEMI patients) | 2 | 2 | 0 | 0 | 0 |
| Alcohol and betadine swabs | | 10 each | 10 each | 10 each | 10 each | †10 each |
| | | | | | | |
| **TRAUMA** | | | | | | |
| Bandages and bandaging supplies: | | | | | | |
| Bandaids | Assorted | 10 | 10 | 5 | 5 | 10 |
| Sterile bandage compresses or equivalent | 4"x4" | 12 | 10 | 10 | 10 | 10 |
| Trauma dressing | 10"x30" or larger universal dressing | 2 | 2 | 2 | 2 | 2 |
| Roller gauze | 3" or 4" | 12 rolls | 8 rolls | 2 rolls | 2 rolls | 8 rolls |
| Cloth adhesive tape | 1, 2, or 3" | 1 roll | 1 roll | 1 roll | 1 roll | 1 roll |
| Triangular bandages with safety pins | | 4 | 2 | 1 | 1 | 2 |
| Tourniquet | See approved list for commercial | 2 | 2 | 1 | 1 | 2 |
| Vaseline gauze | 3"x8", or 5"x9" | 2 | 2 | 1 | 1 | 2 |
| Tongue blade or bite stick | | 2 | 2 | 2 | 2 | 2 |
| Burn Sheets (sterile or clean) – | may be disposable or linen (with date of sterilization indicated) | 2 | 2 | 0 | 2 | 2 |
| Cervical collars | Stiff. Sizes to fit all patients over one year old | 1each | 1 each | 1 each | 1 each | 1 each |
| Cold packs | | 2 | 2 | 2 | 2 | 2 |
| Irrigation equipment and supplies: | | | | | | |
| Saline, sterile | 250mL | 4 | 2 | 1 | 2 | 2 |
| Long spine board and light weight head immobilizer blocks | (or equivalent immobilization device) | 2 | 1 | 0 | 0 | 1 |
| Straps to secure patient to boards | | 2 sets | 1 set | 0 | 0 | 1 set |
| Splints, traction | Adult and pediatric (or a single device suitable for both) | 1 each | 1 each | 0 | 0 | 1 each |

| Description | Strength/Size | ALS Transport Minimum | ALS First Responder Minimum | ALS Special Use Medic Minimum | ALS Wildland Unit Minimum | BLS First Responder Minimum † *Elective skills as required* |
|---|---|---|---|---|---|---|
| **TRAUMA CONT.** | | | | | | |
| Splints, cardboard or equivalent | arm and leg splint | 2 each | 2 each | 1 each | 2 each | 2 each |
| K.E.D. or equivalent | | 1 | 1 | 0 | 0 | 0 |
| Pediatric spinal immobilization board | (or equivalent immobilization device) | 1 | 1 | 0 | 0 | 0 |
| Sheet or commercial pelvic binder | | 1 | 1 | 0 | 0 | 1 |
| | | | | | | |
| **Infection Control** | | | | | | |
| **Meet the minimum requirement per crew member as stated in the California Code of Regulations Title 8 (All Providers)** | | | | | | |
| | | | | | | |
| **Transportation Equipment** | | | | | | |
| Collapsible gurney cot with adjustable contour feature | | 1 | 0 | 0 | 0 | 0 |
| Stair chair or equivalent device | | 1 | 0 | 0 | 0 | 0 |
| Sheets, pillow, pillow case, towels, blankets (cloth or disposable) | | 2 | 0 | 0 | 0 | 0 |
| Scoop stretcher with straps | | 1 | 0 | 0 | 0 | 0 |
| Flat vinyl/canvas stretchers with | | 1 | 0 | 0 | 0 | 0 |
| | | | | | | |
| **MISCELLANEOUS** | | | | | | |
| Blood pressure cuffs (portable): | Adult | 1 | 1 | 1 | 1 | 1 |
| | Large adult or thigh | 1 | 1 | 0 | 0 | 1 |
| | Pediatric | 1 | 1 | 0 | 1 | 1 |
| Obstetrical kit - sterile, prepackaged | | 1 | 1 | 0 | 0 | 1 |
| Restraints - non-constricting wrist and ankle | | 1 set each | 1 set each | 0 | 0 | 1 set each |
| Stethoscope | | 1 | 1 | 1 | 1 | 1 |
| Trash bags/receptacles | | 2 | 2 | 1 | 1 | 2 |
| Blanket | Disposable | 1 each | 1 each | 1 each | 1 each | 1 each |
| Bandage scissors (heavy duty) | | 1 | 1 | 1 | 1 | 1 |
| Emesis basins or emesis bags with containers | | 2 | 2 | 1 | 1 | 2 |
| Water, potable | | 1 liter | 1 liter | 0 | 1 liter | 1 liter |
| Maps, entire county | | 1 | 1 | 0 | 0 | 1 |
| Penlight | | 1 | 1 | 1 | 1 | 1 |
| Triage tags | | 20 | 20 | 20 | 20 | 20 |
| Bed pan | | 1 | 0 | 0 | 0 | 0 |
| Urinal | | 1 | 0 | 0 | 0 | 0 |
| †Glucometer | with ≥10 test strips, lancets, and other appropriate supplies | 1 | 1 | 1 | 1 | †1 |
| Puncture proof sharps container | small | 2 | 2 | 1 | 1 | †1 |
| Thermometer | | 1 | 1 | 0 | 0 | 0 |
| Automatic External Defibrillator | With AED pads | * For EMT-D Provider Agencies (1) | | | | |

| Description | Strength/Size | ALS Transport Minimum | ALS First Responder Minimum | ALS Special Use Medic Minimum | ALS Wildland Unit Minimum | BLS First Responder Minimum † *Elective skills as required* |
|---|---|---|---|---|---|---|
| | | | | | | |
| **AIRWAY** | | | | | | |
| Endotracheal tubes: | sizes-3.0, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0 | 1 each | 1 each | 1 each | 1 each | 0 |
| Laryngoscope handles, with extra batteries | | 2 | 2 | 1 | 1 | 0 |
| Laryngoscope blades: | Miller # 0, 1, 2, 3, 4 Macintosh # 1, 2, 3, | 1 each | 1 each | 1 each | 1 each | 0 |
| i-Gel Supraglottic Airways | Size 3 and Size 5 | 1 each | 1 each | 1 each | 1 each | 0 |
| i-Gel Supraglottic Airways | Size 4 | 2 each | 2 each | 1 each | 1 each | 0 |
| Magill forceps (pediatric and adult) | | 1 each | 1 each | 1 each | 1 each | 0 |
| Adult stylets | | 2 each | 1 each | 1 each | 1 each | 0 |
| 10-20 mL syringe, sterile lubricant | | 2 each | 1 each | 1 each | 1 each | 0 |
| Needle Cricothyrotomy kit with: | 10 or 12 ga needle, 10-20 mL syringe, alcohol and betadine wipes and oxygen supply adapter | 1 | 1 | 1 | 1 | 0 |
| | Or other FDA approved percutaneous cricothyrotomy kit | 1 | 1 | 1 | 1 | 0 |
| Capnography Device | Qualitative or Quantitative | 1 | 1 | 1 | 1 | 0 |
| Hand held nebulizer for inhalation therapy | | 2 | 2 | 1 | 1 | 0 |
| Medrafter or equivalent | | 1 | 1 | 0 | 0 | 0 |
| Portable, battery powered, cardiac monitor-defibrillator with 12-lead ECG capability with the ability to perform computerized ECG readings and provide hard copy ECG tracings, with: | | 1 | 1 | 1 | AED w.manal defib and w/EKG | 0 |
| | Patient ECG cable | 1 | 1 | 1 | 0 | 0 |
| | ECG recording chart paper | 1 | 1 | 1 | 0 | 0 |
| | Adult ECG electrodes | 4 sets | 4 sets | 2 sets | 2 sets | 0 |
| | Defibrillation pads or equivalent - Adult and Pediatric | 1 set each | 1 set each | 1 set each | 1 set each | 0 |
| | Conductive defibrillation pads, | 4 | 4 | 2 | 2 | 0 |
| | or tubes of conductive gel | 2 | 2 | 1 | 1 | 0 |
| IV catheter for pleural decompression | 10 gauge/3 inch | 2 | 2 | 1 | 1 | 0 |
| Asherman chest seal or equivalent open wound dressing | | 1 | 1 | 1 | 1 | 1 |
| Pulse oximeter | | 1 | 1 | 1 | 1 | 1 |
| †Continuous Positive Airway Pressure (CPAP) Ventilator | portable/adjustable pressure settings, FDA Approved with an oxygen supply | 1 | 1 | 0 | 0 | †1 |
| Nasopharyngeal airways (soft rubber) | Medium and Large adult sizes | 2 each | 2 each | 1 each | 1 each | 2 each |
| Lubricant, water-soluble jelly (K-Y) | | 2 | 2 | 2 | 2 | 2 |
| Oropharyngeal airways | (sizes 5.5 – 12 or equivalent) | 2 each | 1 each | 1 each | 1 each | 1 each |
| Adult non-rebreather masks | | 2 | 2 | 1 | 1 | 2 |

| Description | Strength/Size | ALS Transport Minimum | ALS First Responder Minimum | ALS Special Use Medic Minimum | ALS Wildland Unit Minimum | BLS First Responder Minimum † *Elective skills as required* |
|---|---|---|---|---|---|---|
| Pediatric/infant non-rebreather mask | | 2 | 2 | 1 | 1 | 2 |
| Adult nasal cannula | | 4 | 2 | 1 | 1 | 2 |
| Oxygen Cylinders | D or E size cylinder with regulator capable of delivering 2-15 LPM | 1 | 1 | 1 | 1 | 1 |
| | M, H, or K cylinder with wall outlet(s) and constant flow regulator(s) | 1 | 0 | 0 | 0 | 0 |
| **AIRWAY CONT.** | | | | | | |
| Oxygen reserve: | | | | | | |
| | D or E cylinders | 1 | 1 | 0 | 0 | 1 |
| Face masks for resuscitation (clear) | | 2 | 1 | 1 | 1 | 1 |
| Bag-valve mask with O2 reservoir and supply tubing | | | | | | |
| | Adult | 1 | 1 | 1 | 1 | 1 |
| | Pediatric | 1 | 1 | 1 | 1 | 1 |
| | Infant | 1 | 1 | 1 | 0 | 1 |
| Suction equipment and supplies: | | | | | | |
| Rigid pharyngeal tonsil tip | | 2 | 2 | 0 | 0 | 2 |
| Spare suction tubing | | 1 | 1 | 0 | 0 | 1 |
| Suction apparatus (portable) | | 1 | 1 | 1 | 1 | 1 |
| Suction catheters | at least 2 sizes suitable for adult and | 2 each | 1 each | 1 each | 1 each | 1 each |
| | pediatric endotracheal suctioning | | | | | |
| | | | | | | |

# AIRWAY MANAGEMENT

| ADULT | PEDIATRIC (≤34 kg) |
|---|---|
| **BLS** | |
| • Universal Protocol #601<br>• Administer $O_2$ as clinical symptoms indicate (see notes below)<br>• Pulse oximetry<br>• Patients with $O_2$ Sat ≥ 94% without signs or symptoms of hypoxia or respiratory compromise should not receive $O_2$<br>• When applying $O_2$ use the simplest method to maintain $O_2$ Sat ≥ 94%<br>• Do not withhold $O_2$ if patient is in respiratory distress<br><br>• **Foreign Body/Airway Obstruction**<br>  ○ Use current BLS choking procedures<br>  ○ Basic airway adjuncts and suctioning as indicated and tolerated | Same as Adult (except for newborns)<br>• Newborn (< 1 day) follow AHA guidelines – Newborn Protocol #651 |
| **BLS Elective Skills** | |
| • **Moderate to Severe Respiratory Distress**<br>  ○ **CPAP** as needed – CPAP procedure #703 | CPAP not used for patients ≤34 kg |
| **ALS Standing Orders** | |
| • **Foreign Body/Airway Obstruction**<br>If obstruction not relieved with BLS maneuvers<br>  ○ Visualize and remove obstruction with Magill forceps<br>  ○ If obstruction persists consider – Needle Cricothyrotomy Procedure #704<br>  ○ Upon securing airway monitor $O_2$ Sat and $ETCO_2$ – Capnography Procedure #701<br>• Endotracheal intubation – as needed to control airway – Procedure #717<br>• Supraglottic Airway – as needed to control airway if indicated – Procedure #718<br>• Needle thoracostomy with symptoms of tension pneumothorax – Needle Thoracostomy Procedure #705 | • **Foreign Body/Airway Obstruction**<br>If obstruction not relieved with BLS maneuvers<br>  ○ Visualize and remove obstruction with Magill forceps<br>  ○ If obstruction persists consider – Needle Cricothyrotomy Procedure #704<br>  ○ Upon securing airway monitor $O_2$ Sat and $ETCO_2$ – Capnography Procedure #701<br>• Needle thoracostomy with symptoms of tension pneumothorax – Needle Thoracostomy Procedure #705 |
| **Base Hospital Orders Only** | |
| • **Symptomatic Esophageal Obstruction**<br>  ○ **Glucagon** 1mg IV followed by rapid flush. Give oral fluid challenge 60 sec after admin - check a blood sugar prior<br>• As needed | • **Symptomatic Esophageal Obstruction**<br>  ○ **Glucagon** 0.1mg/kg IV not to exceed 1mg followed by rapid flush. Give oral fluid challenge 60 sec after admin - check a blood sugar prior |

| | |
|---|---|
| | • As needed |

**Notes**

- Oxygen Delivery
  - Mild distress – 0.5-6 L/min nasal cannula
  - Severe respiratory distress – 15 L/min via non-rebreather mask
  - Moderate to severe distress – CPAP 3-15 cm H2O
  - Assisted respirations with BVM – 15 L/min
- Pediatric intubation is no longer an approved ALS skill – maintain with BLS options
- Patients requiring an advanced airway will decide which airway to use based on the complexity of the patient's anatomy. If the patient's vocal cords are easily visualized, then Endotracheal Intubation will be performed. If the patient's vocal cords are difficult or unable to be visualized, then a Supraglottic Airway Device will be utilized.
- After placement of any advanced airway, providers will verify placement via a minimum of two different methods. These methods can be any two of the following:
  - Auscultation of lung and stomach sounds.
  - In-Line ETCO2 placement.
  - Colorimetric CO2 Detector Device.
  - Esophageal Bulb Detection Device.

# Endotracheal Intubation

**FOR USE IN PATIENTS >34 KG**

**BLS**

Universal Protocol #601

Pulse Oximetry – $O_2$ administration per Airway Management Protocol #602

**ALS Standing Orders**

- Indications:
  - Patients with a respiratory compromise.
  - ROSC patients requiring airway stabilization
  - Situations where the airway cannot be adequately maintained by BLS techniques.
- Contraindications:
  - Intact gag reflex
- If patient presents with an easily accessible airway (able to visualize the patient's vocal cords), ETI will be indicated.
- Prepare, position, and oxygenate the patient with 100% Oxygen. Ideal positioning is keeping the ears in line with the sternal notch.
- Consider use of video laryngoscopy when available.
- Select appropriate size ET tube and consider the need for endotracheal introducer (Bougie); have suction ready.
- Using the laryngoscope, visualize vocal cords.
- Determine how accessible the patient's airway is. If the patient has a complex airway (unable to visualize the vocal cords due to surrounding anatomy) which would be difficult and time consuming to intubate, consider the use of a supraglottic airway device Procedure # 718.
- Visualization of vocal cords will take no longer than 10 seconds.
- Visualize tube/bougie passing through vocal cords.
- Inflate the cuff with 3-10mL of air.
- Apply waveform capnography (reference Policy #701).
- Auscultate for bilaterally equal breath sounds and absence of sounds over the epigastrium.
- If ET intubation efforts are unsuccessful after the 1st attempt, continue with a BLS airway, re-evaluate the airway positioning before the 2nd attempt. After first failed attempt, consider use of Supraglottic Airways (reference Procedure #718).
- If ET intubation efforts are unsuccessful after the 2nd attempt, continue with a BLS airway and proceed to Supraglottic Airway Procedure #718.
- Patients who have an advanced airway established should be secured with tape or a commercial device. Devices and tape should be applied in a manner that avoids compression of the front and sides of the neck, which may impair venous return from the brain.
- If the patient has a suspected spinal injury:
  - Open the airway using a jaw-thrust without head extension.
  - If airway cannot be maintained with jaw thrust, use a head-tilt/chin-lift maneuver.
  - Manually stabilize the head and neck rather than using an immobilization device during CPR.

| **Base Hospital Orders Only** |
| --- |
| As needed |
| **Notes** |
| • During the initial visualization of the patient's airway if the ALS provider determines the airway to be difficult (unable to visualize the patient's vocal cords), ETI will not be utilized and ALS providers will reference Procedure 718 for SGA.<br>• After placement of the Endotracheal Tube, providers will verify placement via a minimum of two different methods. These methods can be any two of the following:<br>o Auscultation of lung and stomach sounds.<br>o In-Line ETCO2 placement.<br>o Colorimetric CO2 Detector Device.<br>o Esophageal Bulb Detection Device. |

# Supraglottic Airway Device

**FOR USE IN PATIENTS >34 KG**

## BLS

Universal Protocol #601

Pulse Oximetry – $O_2$ administration per Airway Management Protocol #602

## ALS Standing Orders

- Patients who meet indications for **Endotracheal Intubation Procedure #717**
- Patients who after the ALS Provider has visualized the patient's airway and has determined that their airway will be difficult to access.
- SGA use is not approved for pediatric use. SGA shall only be used for patients >36kg.

## I-GEL

- Monitor End-tidal capnography throughout use.
- Select appropriate tube size.

| | | | |
|---|---|---|---|
| | 3 | Small Adult | 30-60kg |
| | 4 | Medium Adult | 50-90kg |
| | 5 | Large Adult | 90+kg |

- While preparing tube, have assistive personnel open the airway, and clear of any foreign objects. Pre-oxygenate with 100% oxygen via bls airway and BVM.
- Apply water soluble lubricant to the distal tip and posterior aspect (only) of the tube, taking care to avoid introduction of the lubricant into or near the ventilatory openings.
- Grasp the lubricated i-gel firmly along the integral bite block. Position the device so that the i-gel cuff outlet is facing towards the chin of the patient.
- Position patient into "sniffing position" with head extended and neck flexed. The chin should be gently pressed down before proceeding to insert the i-Gel.
- Introduce the leading soft tip into the mouth of the patient in a direction towards the hard palate.
- Glide the device downwards and backwards along the hard palate with a continuous but gentle push until a definitive resistance is felt.
- At this point the tip of the airway should be located into the upper esophageal opening and the cuff should be located against the laryngeal framework. The incisors should be resting on the integral bite-block.
- Attach a BVM. While gently bagging the patient to assess ventilation, carefully withdraw the airway until ventilation is easy and free flowing (large tidal volume with minimal airway pressure).
- Confirm proper position by auscultation, chest movement and verification of ETCO2 by waveform capnography.
- The i-gel should be secured down per manufacturer recommendation.
- Patients who have an advanced airway established should be secured with tape or a commercial device. Devices and tape should be applied in a manner that avoids compression of the front and sides of the neck, which may impair venous return from the brain.
- Ensure proper documentation of placement of the Supraglottic airway including verification methods.

| Base Hospital Orders Only |
| --- |
| As needed |

| Notes |
| --- |
| **Contraindications**<br>•Gag reflex. •Caustic ingestion. •Known esophageal disease (e.g., cancer, varices, or stricture). |

- Following visualization of the patient's airway and determining the patient's airway to be accessible (able to visualize the patient's vocal cords), SGA will not be utilized and ALS providers will reference Procedure #717 for ETI.
- To verify patency and placement of the SGA Device, providers will verify placement via a minimum of two different methods. These methods can be any of the following:
    - Auscultation of lung sounds
    - In-Line ETCO2 placement
    - Colorimetric CO2 Detector Device
    - Esophageal Bulb Detection Device