Airway Management Course

McHenry Western Lake County EMS
Objectives

- Discuss the uses of the basic airway adjuncts
- Review the use of suctioning and introduce new device - Ducanto Suction Catheter
- Review DAI medications
- Discuss Endotracheal Intubations and talk about King Vision Laryngoscope
- Discuss procedure and documentation
- Review of King LT-D
- Practice with the King Vision
How we got to this point

- 3 years ago Intubation was discontinued due to poor provider performance
- MWLCEMS was at 36% success rate
- Technology has advanced in that time
- EMS Office started looking into this device in late June 2017
- Multiple meetings took place to get where we are now
- MWLCEMS decision was based on this being the best practice for ET Intubation.
What is expected

- Complete the Airway Management Class.
- Practice the skill within your departments.
- Complete a written test with an 80%
- Demonstrate competency with Dr. Pacini
  - NWCEMS Skill validation will be accepted for the King Vision competency.
- Once your department has been trained, the equipment/drugs will be added to your vehicles.
Airway management and ventilation are the first and most critical steps in the initial assessment of every patient you will encounter.
Airway Adjuncts
Oropharyngeal Airway
Insert oropharyngeal airway with tip facing the palate
Rotate the airway 180° into position
Malposition of oropharyngeal airway

Too Short
Improper placement of oropharyngeal airway
Nasopharyngeal Airway
Nasopharyngeal Airway
Nasopharyngeal Airway inserted
# Oxygen Delivery Devices

<table>
<thead>
<tr>
<th>Device</th>
<th>Oxygen percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nasal cannula</td>
<td>24 - 44%</td>
</tr>
<tr>
<td>Non-rebreather mask</td>
<td>80 – 95%</td>
</tr>
<tr>
<td>Bag Valve Mask</td>
<td>90-100%</td>
</tr>
</tbody>
</table>
Bag Valve Mask Ventilation
Bag Mask Ventilation

• The key to ventilation volume:
• *Enough to produce obvious chest rise*
Bag Mask Ventilation

- **Advantages**
  - Provides immediate ventilation and oxygenation
  - Operator gets sense of compliance and airway resistance
  - May provide excellent short-term support of ventilation
  - High oxygen concentrations are possible
  - Can be used to assist spontaneous respirations

- **Potential complications**
  - Hypoventilation
  - Gastric inflation
Suctioning
Types of portable suction
Orotracheal Suctioning

The purpose of oral suctioning is to maintain a patent airway and improve oxygenation by removing mucous secretions and foreign material (vomit or gastric secretions) from the mouth and throat (oropharynx).
Tracheal Bronchial Suctioning

- Check equipment
- Preoxygenate with 100% O2 for 3-5 minutes
- Use sterile technique
- Insert suction catheter through the tube
- Apply suction and remove catheter with a rotation motion
- Suction no longer than 10 seconds
Suction is immediately available once connected to the suction source. No thumb port!
Ducanto Suction Catheter

- Much larger diameter catheter specifically for Intubations
- You may still use Yankauers for other suction needs
- Ducanto will go with curve of King Vision
Holding the Ducanto

- SALAD
  - Suction
  - Assisted
  - Laryngoscopy and
  - Airway
  - Decontamination
Ducanto vs Yankauer
“Suction Wars”

https://vimeo.com/106280641
The purpose of DAI is to achieve rapid tracheal intubation of a patient with protective airway reflexes intact who needs an immediate airway through the use of pharmacological aids and techniques that facilitate intubation.
Indications for DAI

- Actual or potential airway impairment or aspiration risk (trauma, stroke, AMS)
- Actual or impending ventilatory failure (severe CHF, pulmonary edema, COPD, asthma, anaphylaxis with RR <10 or >40) shallow/labored effort; or SpO2 <92
- Increased work of breathing (retractions, use of accessory muscles) resulting in severe fatigue
Indications for DAI

- GCS 8 or less due to an acute condition unlikely to be self-limited (example of self limited conditions: seizures, hypoglycemia, postictal, certain drug overdoses)
- Inability to ventilate/oxygenate adequately after insertion of OPA/NPA and/or via BVM
- Need for ↑ inspiratory or positive end expiratory pressures to maintain gas exchange
- Need for sedation to control ventilations
Contraindications/Restrictions

- Coma with absent airway reflexes or known hypersensitivity/allergy.
- Use in pregnancy could be potentially harmful to the fetus.
- You must consider risk/benefit.
Preparing the Patient

- **Preoxygenate**
  - Ventilate for 3 min w/O₂ 12-15 L/BVM with O₂ reservoir; at 10 NPM unless asthma/COPD (6-8 BPM)
  - Squeeze bag over 1 sec with sufficient volume to see chest rise (400-600ml)
  - Avoid high pressure and gastric distention
  - Assess patient for difficult intubation
Benzocaine 20%
(Hurricaine, Americaine, Cetacaine)
Class:

- Topical Anesthetic
Actions:

- Anesthetic for the mucus membranes
- Helps suppress the gag reflex.
Indications:

- To facilitate DAI by suppressing the gag reflex
Dosing/Routes:

- 1-2 second spray, 30 seconds apart x2 to posterior pharynx
How supplied:

- 1 can supplied to each provider.
Contraindications:

- Hypersensitivity/allergy to “caines”.
Precautions:

- May cause individual to cough as it is sprayed into the posterior pharynx.
Side effects/adverse reactions:

- Suppressed gag reflex
- Unpleasant taste

Ref: MWLCEMS Protocol and 2000 Mosby’s Nursing Drug Reference Book
Etomidate
(Amicate)
Class:

- General anesthetic
- Chemical Class: Nonbarbiturate hypnotic
Actions:

- Acts at the level of reticular activating system to produce anesthesia.
- Sedative-hypnotic without analgesic activity
Reticular activating system

- The reticular activating system is the name given to the part of the brain believed to be the center of arousal and motivation in humans.

- The activity of this system is crucial for maintaining the state of consciousness. It is situated at the core of the brain stem between the medulla oblongata and midbrain.

- From Wikipedia.org
Indications:

- Drug assisted intubations
Dosing/Routes:

- 0.5 mg/kg IVP/IO
- Onset: Within 1 minute
- Duration: Usually brief (3-5 minutes)
- Bring unused portion to the pharmacy for replacement

Dosing guide:
- 90 lbs - 99 lbs  20-22mg
- 100 lbs - 124 lbs  23-25 mg
- 125 lbs - 149 lbs  28-31 mg
- 150 lbs - 174 lbs  34-37 mg
- >175 lbs   40 mg

So anyone over 175 lbs they get all 40 mg of Etomidate!
How supplied:

- 20mg or 40mg Vial
- 2mg/ml
Contraindications:

- Septic shock d/t adrenal suppression
- Children less than 10 yrs
- Caution in pregnancy (consider the benefit/risk)
- Use large proximal vein to reduce pain at injection site
Side effects/adverse reactions:

- Transient skeletal muscle movement (myoclonus)
- Transient venous pain on injection (less freq. in lg proximal veins)
- Resp: Hyper/hypo ventilation; apnea of short duration
- Laryngospasm
- CV: Hyper/hypotension,
- Increased or decreased pulse
- GI: Nausea and vomiting

Ref: MWLCEMS Protocol and 2000 Mosby’s Nursing Drug Reference Book
Ketamine
(Ketalar)
Class:

- Nonbarbituate
- General anesthetic
- Analgesic
Actions:

- Dissociative anesthetic, produces cataleptic like state
- Profound analgesia
- N-Methol-D-aspartate (NMDA) receptor antagonist
- DEA Schedule III controlled substance
Indications:

- Pre DAI sedative for those with hx of asthma
- Sedation for agitated or violent behavior; excited delirium
- Non narcotic alternative to fentanyl and morphine
- After giving; minimize stimulation (verbal/auditory, tactile, visual)
Dosing/Routes:

- **DAI** (asthma) 2 mg/kg slow IVP (over 1 min) or 4 mg/kg IN/IM

- **Excited delirium**: 2 mg/kg slow IVP (over 1 min) or 4 mg/kg IN/IM. May repeat at ½ dose after 10 min up to max dose of 4 mg/kg (500 mg)
Dosing/Routes

- **Alternative if no Fentanyl**: 0.5 mg/kg slow IVP (over 1 min) or IN/IM; 1 mg/kg; May repeat at ½ dose after 10 min

- **IV injection**: 100 mg/ml concentrate should be diluted w/equal volume of NS
How supplied:

- 200 mg/20 ml vial
- 10mg/ml
- Packaging may vary
- Dosing may have to be diluted!
- 500mg/5ml
Contraindications:

- Withhold if elevated B/P serious hazard
  - Hypertensive Crisis
  - Use of Methamphetamine or similar drug
  - Hyperthyroidism
  - Aortic Dissection
  - Acute MI, Angina, HF
  - Intracranial hemorrhage
  - Acute globe injury or glaucoma
Emergence Reactions

- Ketamine is associated with untoward emergence reactions after procedural sedation, including nightmares and hallucinations. Coadministration of midazolam to mitigate this reaction is ineffective in children.
Precautions:

- Emergence reactions: w/ Versed (standard dose for sedation) will decrease the incidence by 50%
Side effects/adverse reactions:

- **CV**: Transient increase in HR and HTN (returns to premed levels in 15 min)
- **CNS**: Psychosis (5-30%) Increase in ICP; dysphoria
- **MSK**: Rigidity, dystonic reactions, depressed reflexes
- **Psych**: Emergence reactions, anxiety, restlessness, confusion, disorientation, auditory and visual hallucinations, delirium, irrational behavior lasting 2-24 hours
- **Resp**: Beta adrenergic and vagolytic properties produce bronchodilation.

Ref: MWLCEMS Protocol
**Drug chart in SOP**

<table>
<thead>
<tr>
<th>Weight</th>
<th>1 mcg/kg</th>
<th>0.5 mcg/kg</th>
<th>2 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dose = Amount</td>
<td>Dose = Amount</td>
<td>Dose=amount</td>
</tr>
<tr>
<td>132 - 150 lbs = 60-68 kg</td>
<td>60 mcg = 1.2 mL</td>
<td>30 mcg = 0.6 mL</td>
<td>120-136 mg = 2.4-2.6 mL</td>
</tr>
<tr>
<td>154 - 172 lbs = 70-78 kg</td>
<td>70 mcg = 1.4 mL</td>
<td>35 mcg = 0.7 mL</td>
<td>140-156 mg = 2.8-3 mL</td>
</tr>
<tr>
<td>176 - 194 lbs = 80-88 kg</td>
<td>80 mcg = 1.6 mL</td>
<td>40 mcg = 0.8 mL</td>
<td>160-176 mg = 3.2-3.5 mL</td>
</tr>
<tr>
<td>198 - 216 lbs = 90-98 kg</td>
<td>90 mcg = 1.8 mL</td>
<td>45 mcg = 0.9 mL</td>
<td>180-196 mg = 3.6=3.8 mL</td>
</tr>
<tr>
<td>220-238 lbs = 100-108 kg</td>
<td>100 mcg = 2 mL</td>
<td>50 mcg = 1 mL</td>
<td>200-216 mg=4-4.4 mL</td>
</tr>
</tbody>
</table>

**Additional adult ketamine doses**

<table>
<thead>
<tr>
<th>lbs = kg</th>
<th>Dose = Amount</th>
<th>lbs = kg</th>
<th>Dose = Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>242 lbs = 110 kg</td>
<td>220 mg = 4.4 mL</td>
<td>286 lbs = 130 kg</td>
<td>260 mg = 5.2 mL</td>
</tr>
<tr>
<td>253 lbs = 115 kg</td>
<td>230 mg = 4.6 mL</td>
<td>297 lbs = 135 kg</td>
<td>275 mg = 5.5 mL</td>
</tr>
<tr>
<td>264 lbs = 120 kg</td>
<td>240 mg = 4.8 mL</td>
<td>308 lbs = 140 kg</td>
<td>280 mg = 5.6 mL</td>
</tr>
<tr>
<td>275 lbs = 125 kg</td>
<td>250 mg = 5 mL</td>
<td>319 lbs = 145 kg</td>
<td>290 mg = 5.8 mL</td>
</tr>
</tbody>
</table>

**Adult FENTANYL dosing**

- Concentration: 100 mcg / 2 mL (50 mcg / mL)
- 1 mcg/kg (max 100 mcg 1st dose) IV/IN/IO;
- may repeat 0.5 mcg/kg in 5 min (max 50 mcg)
- Elderly (>65), debilitated, SCI: 0.5 mcg/kg (max 50 mcg)
- Contact OLMC for children < 2 and higher doses

**Adult KETAMINE doses**

- Concentration: (50 mg/mL)
- ***Calculated at 2 mg/kg***
- Double for IM/IN
- Max dose: 500 mg
Versed
(Midazolam)
Class:

- Sedative, hypnotic
- Chemical class: Benzodiazepine, short acting
Actions:

- Short acting benzodiazepine
- CNS depressant
- Sedative/hypnotic
- Sleep induction
- Anxiolysis (↓ anxiety)
- Fast onset/offset
Indications:

- Suppress seizure activity
- Severe anxiety/agitation
- Post intubation sedation
Dosing/Routes:

- Procedural sedation: 2mg increments every 30-60 seconds up to 10mg. May repeat to a max of 20mg
**Dosing/Routes**

- **Anxiety or Seizures:** 2mg increments every 30-60 seconds IVP/IO (0.2mg/kg IN) up to 10mg. May repeat to 20mg.

- **Peds:** 0.1mg/kg IVP/IO/IM (0.2mg/kg IN) Max single dose 5mg. May repeat to 10mg
How supplied:

- 5mg/5ml vial
- 1mg/ml
Contraindications:

- Known hypersensitivity
- Hypotension (SBP < 90)
- Glaucoma
- Pregnancy unless seizing
Side effects/adverse reactions:

- Drowsiness
- Sedation
- Confusion
- Amnesia
- Ataxia (gross incoordination of muscle movements)
- Respiratory depression
- Respiratory arrest
- Hypotension

Ref: MWLCEMS Protocol and 2000 Mosby’s Nursing Drug Reference Book
DAI Procedure

- Premedicate while pre-oxygenating your patient prior to intubation. Consider:

- Gag reflex present:
  - Benzocaine 1-2 second spray, 30 seconds apart x2 to posterior pharynx

- Pain: Pain mgt if needed-
  - Fentanyl 1 mcg/kg up to 100 mcg. May repeat 0.5 mcg/kg in 5 min (**max 50 mcg**) IVP/IN/IM/IO.
  - Additional doses require OLMC. May repeat 0.5 mcg/kg q. 5 min up to a total dose of 200 mcg.
Sedation for DAI

- Etomidate 0.5 mg/kg IVP
  
  Or

- Ketamine (preferred for Asthma) 2mg/kg slow IVP (over 1 min) or 4 mg/kg IM

- Allow for clinical response before intubation (if possible)

- Monitor VS, level of consciousness, skin color and Sp02 and EtC02 during procedure
Endotracheal Intubation
Tracheal Intubation

- **Advantages**
  - Protects airway from aspiration of foreign material
  - Facilitates ventilation and oxygenation
  - Facilitates suctioning of trachea and bronchi
  - Prevents gastric inflation
Tracheal Intubation

- Indications
  - Inability to ventilate the unconscious patient after insertion of pharyngeal airway
  - Inability of patient to protect own airway
  - Need for prolonged mechanical ventilation
Tracheal Intubation

- Contraindications
  - Cardiac Arrest per AHA Guidelines 2015.
  - Acute head injury with increased ICP.
AHA Guideline

ACLS: Cardiac Arrest, Arrhythmias, and Their Treatment

Cardiac Arrest Circular Algorithm—2015 Update

Start CPR
- Give oxygen
- Attach monitor/defibrillator

2 minutes

Check Rhythm

Return of Spontaneous Circulation (ROSC)

If VF/pVT Shock

Drug Therapy
IV/IO access
Epinephrine every 3-5 minutes
Amiodarone for refractory VF/pVT

Consider Advanced Airway
Quantitative waveform capnography

Treat Reversible Causes

Continuous CPR

Monitor CPR Quality

Continuous CPR
Tracheal Intubation

Complications

- Trauma—teeth, lips, tongue, mucosa, vocal cords, trachea
- Esophageal intubation
- Vomiting and aspiration
- Hypertension and arrhythmias
Tracheal Intubation

- **Recommendations**
  - Do not take longer than 10 seconds per attempt
  - After 2\textsuperscript{nd} unsuccessful attempt, insert King Airway
  - Auscultate the thorax and epigastrium after intubation

*NOTE: King Vision is designed for adult patients only! This means 13 years older!*
Dr. Jarvis King Vision Video

- Please make sure you log into nm.org/NWems and go to the Education page.
- You will find a 20 min video link done by Dr. Jarvis about the King Vision program that he is in charge of in Texas.
- This part of the training should be done on your own.
Equipment for Intubation

- Laryngoscope with channeled blade
- EndoTracheal tubes
- Bougie Stylet
- 10-mL syringe
- Water-soluble lubricant
- Suction unit and tubing
- Ducanto Catheter
- ET Tube Holder
Endotrachial Tube
Laryngoscope Channeled Blade

**King Vision Video Laryngoscope Disposable Blade, Channeled AMBU**

The King Vision® video laryngoscope features a disposable blade available in either a channeled or standard version. Each blade is individually packaged providing new CMOS optics, LED light and anti-fog lens in every blade.

Features:

- Anti fog coating on distal lens
- AP Blade Height: 18mm (channeled)
- Blade length: 17cm
- Blade Width: 29mm (channeled)/ 16mm (distal tip)
- Camera Chip: CMOS
- Camera Resolution: 640 x 480 VGA
- Light Source: White LED
- Disposable material: polycarbonate/TPE
- ET size: 6.00mm - 8.0mm (channeled blade)
King Vision
King Vision Laryngoscope
King Vision Overview

- [http://www.youtube.com/watch?v=s1Y94G07f0Y](http://www.youtube.com/watch?v=s1Y94G07f0Y)
Fundamental Operations of King Vision Laryngoscope

http://www.youtube.com/watch?v=iC1wTOyHopA
ETT Delivery with Channeled Blade

http://www.youtube.com/watch?v=s6pjhJXemL8
Visualization of Vocal Cords (either way works with King Vision)

“The View”

Straight
Under Epiglottis

Curved
Into Vallecula
Glottic Opening
Glottic Opening
Glottic Opening with King Vision
Intubating the patient
IMC

- EKG monitor
- Spo2 Monitor
- EtCo2 Monitor
- Suction Unit
- Evaluate before and after airway intervention
- Confirm patent IV
Preparing the Patient

- Position them supine in the sniffing position
- Do not tilt head back in trauma patient
- Earlobe horizontal with the xiphoid if not contraindicated
Preparing the Patient

- **Preoxygenate**
  - Ventilate for 3 min w/O₂ 12-15 L/BVM with O₂ reservoir; at 10 NPM unless asthma/COPD (6-8 BPM)
  - Squeeze bag over 1 sec with sufficient volume to see chest rise (400-600ml)
  - Avoid high pressure and gastric distention
  - Assess patient for difficult intubation
Preparing the Equipment

- Check your suction source
- Attach a rigid tip (Ducanto Suction Catheter)
- King Vision with Channeled Blade
- ET Tube 6.0 to 8.0 (place in blade) 7.0 & 7.5 most common
- Bougie, 10ml syringe, lubricant
- Capnography, ET tube holder, head blocks, tape, stethoscope
- Have alternate airway selected and ready to go if needed.
Sizing your ET Tube

- Size of the little finger
- Size of the Nares
Check Equipment
Preparing the Equipment

- Check ET Tube cuff while in package; fill with 10ml of air and then leave syringe attached to cuff.
- Place lubricant inside channel of King Vision Blade.
- Assemble King Vision, load tube into channel, load bougie inside tube, ensure tube and bougie do not extend past channel in blade.
Why are we using Bougi?
Bougi with King Vision
Intubate

- Maintain passive O2 at 6L/NC during procedure
- In line stabilization if indicated
- Assist ventilations at 10 BPM if decrease in B/P and hypoxic.
Confirm tube placement

- Visualize the ET going through the cords
- Attach an EtCO2 detection device
- Ventilate and observe chest rise
- Auscultate over epigastrium for absence of sounds
- Observe bilateral anterior chest movement
- Observe midaxillary lines for movement
- If EtCO2 not detected, confirm with direct laryngoscopy
Note the line on the tube and the Bougi
Confirmation of Tracheal Tube Placement

EtCO2 Colorometric indicators
If intubation is successful

- 02 15 L/BVM at 10 breaths per minute (6-8) if asthma
- Inflate the cuff
- Note the number at either the teeth or gums
  - (3 X Tube Diameter) 7.0 x 3 = 21
- Secure ET with commercial device
- Reassess breath sounds
- Apply lateral head immobilization
Reconfirm placement
If intubation is successful

- **BE NICE TO YOUR PATIENTS!!!**
- Versed (midazolam) 2 mg IVP/IN increments to 20 mg as needed if BP >90 (MAP >65) for post-intubation sedation
Continuously recheck and reconfirm the placement of the ET tube with your Capnography.
Endotracheal Tube Placement Pearls

- Watch tube pass through the vocal cords
- Watch for equal chest rise
- Look for condensation in the tube
- Listen for bilateral breath sounds
- Listen for absence of “toilet flush” over epigastric area
ET Tube Markings

- Suggested vocal cords marker
- Internal diameter in mm marked on the tube
- Depth markers in cm to indicate position at the teeth
Endotracheal Tube Placement Pearls

- Look for signs of patient improvement ie. Color, rise in SPO2
- End tidal detector color change
- EtCo2 reading between 35-45
- Mark tube and secure
- Do not let go of ET tube until it’s secured!!!!!
Always remember your DOPE pneumonic when you have a patient intubated and things suddenly change.

- D = Displacement of tube
- O = Obstruction of tube
- P = Pneumothorax
- E = Equipment failure
Remember!

- Before you move the patient to the ER cart, have someone verify your tube placement.
Cleaning the Camera

- http://www.youtube.com/watch?v=efErtVpRxVU
Documentation
Imagetrend Airway
Imagetrends Airway

Procedure Complication
- None
- Esophageal placement (immediate recognition)
- Esophageal placement (other)

Procedure Comments

Airway Confirmations
- Airway Device Being Confirmed
  - Endotracheal Tube
  - King Airway
  - Combitube
  - Nasotracheal tube
  - Cricothyrotomy Tube
  - Other Supraglottic Airway
  - More...

Airway Device Placement Confirmed Method (Multi Select)
- Auscultation
- EDD
- Condensation in Tube
- Visualization of Vocal Cords
- ETCO2 Colorimetric
- ETCO2 Waveform
- More...

Gastric Sounds
- No
- Yes
<table>
<thead>
<tr>
<th>Breath Sounds-Right</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breath Sounds-Left</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Chest Rise-Right</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Chest Rise-Left</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
McHenry Western Lake County EMS System
King Vision Field Evaluation Form

Complete this form for ALL patients on whom King Vision intubation was attempted.

**Instructions to paramedics:** Forward the completed forms to Cindy Tabert by fax at 224-654-0165 or by email at ctabert@centegra.com

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMR agency</td>
<td>Date</td>
</tr>
<tr>
<td>Incident No.</td>
<td></td>
</tr>
<tr>
<td>Cardiac Arrest</td>
<td>Yes/No</td>
</tr>
<tr>
<td>DAI</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Pt. gender</td>
<td>Male/Female</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Approx. at</td>
<td></td>
</tr>
</tbody>
</table>

**Intubation via King Vision**

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 pass attempt successful?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>#2 pass attempt successful?</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

**If VL Intubation Successful**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airway suctioning required?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Difficulty placing the blade into the mouth?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Tube Size</td>
<td>6.0 7.0 7.5 8.0</td>
</tr>
<tr>
<td>Bougie used as instructed?</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

**If VL Unsuccessful**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airway secretions present?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Mouth opening too small for blade?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Visualization successful but unable to pass tube?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Blade tip placed in vallecula?</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

If there was difficulty intubating, new information learned or general feedback on use please use the space below.

Please indicate who placed the ET Tube ________________________________
What were the indications for intubation? ______________________________
ED Physician signature confirming placement ______________________________

In the event of a failure or malfunction:
An incident form will be completed by the crew for any adverse effects or malfunction and forwarded to Cindy Amore and Cindy Tabert so they may take appropriate action. In the event of a device failure, The Rescue Airway shall always be ready to be used as back up airway device.
If intubation is unsuccessful

- Re-oxygenate and repeat the intubation attempt.
- Consider need for additional medication
- If you are unsuccessful after 2 attempts or cannot visualize cords…
- Insert an alternate airway and ventilate with O2 at 15 L/BVM
King Tube

(contraindications)

- In responsive patients
- In children under 3 feet tall
- In known esophageal disease
- When caustic poisons have been ingested
- Presence of a gag reflex
“Quick reference”

- Use this guide to figure out which tube to use.

2 = 3-4 ft patient (2-3-4)

3 = 4-5 ft patient (3-4-5)

4 = 5-6 ft patient (4-5-6)
Endotracheal Intubation is still not the preferred airway choice per the AHA for Cardiac Arrest.

It is not recommended to intubate a Head Injured patient due to the increase in ICP.
Remember!

It’s not how many tubes you place, it’s *recognizing* the MISPLACED ET tube
Time to practice!