Northwest Community EMS System
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King Vision Training – 2 hours CE (site code 090700E0618)

Four Major Points

1. This is a new skill - Treat it as such, how you intubate with this device is different!
2. Have and use suction!!! The device is not a periscope. Secretions will obscure the camera. The System has adopted the Ducanto catheter intentionally to make suction more effective.
3. Hold the device like a pencil; low near the start of channeled blade. This hold will prevent you from inserting the blade too deeply and also change old muscle memory techniques.
4. Find the epiglottis first on view, NOT cords. Device is meant to function like a Macintosh blade, with tip in vallecular space. Finding epiglottis prevents too deep of an insertion

   Remember, device is used by pulling back, i.e. Beers not Cheers! NO lift and look!

Device Specifics

- Only one blade (channeled blade), this is the disposable part!
- Agencies purchase the handle (camera). Blade exchange will occur at hospitals after 7-1-18.
- Device works on 3 AAA batteries. Continuous use should have a battery life of 60-90 minutes.
- Green indicator in upper right hand corner of optic means good battery life.
- Blinking red light means 5% or less battery life remains, change ASAP.
- When batteries are dead, intubation with the device is IMPOSSIBLE, do not try it
- Clean optic portion with bleach solution or Cavicide wipes, no device immersion. Green wipes at NCH are suitable. Check with hospital EMSC as to their brand of appropriate wipes.
- Hydrogen peroxide wipes are not recommended by manufacturer, as they destroy screens.

SOP Specifics

- All adult intubations will use this device after July 1, 2018.
- Same attempt limits: i.e., two failed attempts with King Vision or intubation not feasible - move to King LTSD or other approved extraglottic airway
- All other intubation protocols are unchanged: DAI, in-line, etc.

Two possible exceptions:

1. **Pediatrics patients**
   - No age stipulation, may use if the device will fit into the child's mouth
   - If it won't fit, then use direct laryngoscopy
   - Manufacturer believes it could be used in children as young as a 4 years of age
   - Best estimation is about a 7-8 yr old is the youngest child on which it should attempted
   - Procedure remains the same otherwise
2. **Foreign Body Obstruction**: Channeled blade may not accommodate a Magill forcep but has been used successfully.

Cardiac Arrest Management

- Cardiac arrest patients CAN BE intubated using King Vision without stopping chest compressions; uninterrupted time on chest is paramount and most important intervention.
- Patients with interrupted compressions do poorer in achieving ROSC.
- Patients with ROSC who have a secured airways do better.
- The medic has the choice on how to best manage the airway in an arrest: BLS, ETI, extraglottic

Other Specifics

- Each paramedic/PHRN must have competency demonstrated and measured on System skill sheet prior to implementation.
- Agencies will complete a King Vision Feedback Form for the first 20 intubations using device.
- Quarterly Intubation Competency requirements remain except replace King Vision for direct laryngoscopy. Requirement to also complete quarterly King LTS-D competency remains in effect.
- The preferred method of Image*Trend* **documentation** of laryngoscopy is to use the "Airway Confirmation" Powertool.

NWC EMSS Skill Performance Record

OROTRACHEAL INTUBATION w/ KING VISION & Bougie

Name:	1st attempt: ☐ Pass ☐ Repeat
Date:	2nd attempt: ☐ Pass ☐ Repeat

Instructions: An adult is found in bed with apnea. No trauma is suspected. Prepare the equipment and intubate the patient.

Performance standard 0 Step omitted (or leave blank) 1 Not yet competent: Unsuccessful; required critical or excess prompting; marginal or inconsistent technique 2 Successful; competent with correct timing, sequence & technique , no prompting necessary	**Attempt 1 rating**	**Attempt 2 rating**
* Takes or verbalizes BSI precautions: gloves, goggles, facemask		
Prepare patient ☐ Open the airway manually ☐ *Elevate tongue, insert BLS adjuncts: NPA or OPA unless contraindicated		
Assess SpO_2 on RA if time and personnel allow; auscultate breath sounds for baseline		
***Preoxygenate**/ventilate for 3 min w/ O_2 12-15 L/BVM with O_2 reservoir; at 10 BPM unless asthma/COPD (6-8 BPM); squeeze bag over 1 sec with sufficient volume to see chest rise (~400-600mL) – avoid high pressure & gastric distention. Ventilate with room air until O_2 source available.		
Assess for signs suggesting a difficult intubation: neck/mandible mobility, oral trauma, loose teeth; F/B; ability to open mouth, Mallampati view, thyromental distance; overbite		
Selects, checks, assembles equipment		
Have everything ready before placing blade into mouth ☐ Prepare suction equipment (DuCanto rigid and flexible catheters); turn on to ✓ unit; suction prn ☐ King Vision & Blade (curved channeled) ☐ Select ETT 7.0 & 7.5 (must fit into channeled blade) ☐ Bougie; 10mL syringe, water-soluble lubricant ☐ Capnography, commercial tube holder, head blocks or tape, stethoscope ☐ Have alternate airway selected, prepped, & in sight (King LT) & Salem sump tube		
* Check ETT cuff integrity while in package; fill syringe w/ 10 mL of air; leave attached to pilot tubing		
Place lubricant inside channel of King vision Blade		
* Assemble King Vision; ensure it is operational. Load tube into lubricated channel; load bougie inside tube. Ensure tube and bougie do not extend past channel in blade		
Pass tube: * (Allow no more than 30 sec of apnea)		
☐ Maintain O_2 6 L/NC during procedure ☐ Assistant or examiner stops ventilating pt; withdraws OPA (NPA remains) ☐ Have partner apply lip retraction, external laryngeal pressure ☐ Monitor VS, level of consciousness, skin color, $ETCO_2$, (SpO_2 if perfusing rhythm) q. 5 min. during procedure; time elapsed		
START TIMING tube placement after last breath_____ ☐ Open mouth w/ cross finger technique ☐ *Insert King Vision blade directly midline holding the blade right above the channeled portion, not on large handle portion below screen ☐ *Insert the blade down the midline of the tongue until you reach the back of the tongue and you can visualize the epiglottis ☐ *Seat blade in the vallecula, do not lift blade it is a non-displacing device. Look to visualize epiglottis, posterior cartilages, and/or vocal cords		
***Visualization** ☐ Advance bougie through the glottis. If needed, twist the bougie, like a pencil, to the left or right to guide between the cords.		
***Insertion of ET tube** ☐ Intubator maintains view with King Vision in place and then advances the ETT over the bougie and through the glottis ☐ Counterclockwise rotation of ETT facilitates insertion through vocal cords into trachea if met with resistance at the glottic opening.		
***If > 30 sec: of apnea**; remove king vision, reoxygenate X 30 sec. If pt remains good candidate for ETI, change position, blade, or PM and attempt again. May go straight to King LT if unable to visualize anything.		

Performance standard 0 Step omitted (or leave blank) 1 Not yet competent: Unsuccessful; required critical or excess prompting; marginal or inconsistent technique 2 Successful; competent with correct timing, sequence & technique , no prompting necessary	**Attempt 1 rating**	**Attempt 2 rating**
* Once ETT is inserted to proper depth (3X tube ID at teeth), firmly hold ETT in place, remove tube from channel by taking tube to corner of the mouth. Carefully remove blade from mouth and bougie from ETT.		
* **Confirm tracheal placement:** ☐ Ensure adequate ventilations & oxygenation: 15 L O_2; ventilate as needed at 10 BPM unless asthma/COPD (6-8 BPM)–observe chest rise; auscultate over epigastrium, both midaxillary lines and anterior chest X 2. ☐ **Definitive confirmation**: **monitor $ETCO_2$** number & waveform. ☐ **Time of tube confirmation**: (Seconds of apnea)_____		
Troubleshooting ☐ *If breath sounds only on right, withdraw ETT slightly and listen again. ☐ *If in esophagus: remove ETT, reoxygenate 30 sec; repeat from insertion of blade with new tube ☐ *If ETT cannot be placed successfully (2 attempts) or nothing can be visualized; attempt extraglottic airway.		
If tube placed correctly ☐ *If breath sounds present and equal bilaterally**, inflate cuff** w/ up to 10 mL air to proper pressure (minimal leak) & remove syringe ☐ Note ET depth: diamond on ETT level w/ teeth or gums (3 X ID ETT) ☐ * Insert OPA; align ETT with side of mouth; secure ETT with commercial tube holder; apply lateral head immobilization.		
If secretions in tube or gurgling sounds with exhalation: suction prn ☐ Select a flexible suction catheter ☐ Preoxygenate patient ☐ Mark maximum insertion length with thumb and forefinger ☐ Insert catheter into the ET tube leaving catheter port open ☐ At proper insertion depth , cover catheter port and applies suction while withdrawing catheter ☐ Ventilate/direct ventilation of patient (NO SALINE FLUSH)		
* **Reassess**: Frequently monitor SpO_2, $EtCO_2$, tube depth, VS, & lung sounds enroute to detect displacement, complications (esp. after pt movement), or condition change If intubated & deteriorates, consider**: D**isplacement of tube, **O**bstruction of tube, **P**neumothorax, **E**quipment failure (DOPE)		
Post-intubation sedation: If pt remains unconscious but begins to bite the ETT, give **midazolam** in 2 mg increments IVP as needed up to total of 20 mg for post-intubation sedation		
State complications of the procedure: ☐ Post-intubation **hyperventilation**: Use watch, clock, timing device ☐ **Barotrauma:** pneumothorax & tension pneumothorax; esophageal perforation ☐ Trauma to teeth or soft tissues ☐ Undetected esophageal intubation ☐ Mainstem intubation ☐ Hypoxia, dysrhythmia ☐ **Over sedation**		
***Critical Criteria: Check if occurred during an attempt (automatic fail)** ☐ Failure to initiate ventilations within 30 seconds after applying gloves or interrupts ventilations for greater than 30 seconds at any time ☐ Failure to take or verbalize body substance isolation precautions ☐ Failure to voice and ultimately provide high oxygen concentrations [at least 85%] ☐ Failure to ventilate patient at appropriate rate ☐ Failure to provide adequate volumes per breath [maximum 2 errors/minute permissible] ☐ Failure to pre-oxygenate patient prior to intubation and suctioning ☐ Failure to successfully intubate within 2 attempts without immediately providing alternate airway ☐ Failure to disconnect syringe **immediately** after inflating cuff of ET tube ☐ Uses teeth as a fulcrum ☐ Failure to assure proper tube placement by capnography and auscultation of chest bilaterally and over the epigastrium ☐ Inserts any adjunct in a manner dangerous to the patient ☐ Suctions patient excessively or does not suction the patient when needed ☐ Failure to manage the patient as a competent paramedic ☐ Exhibits unacceptable affect with patient or other personnel ☐ Uses or orders a dangerous or inappropriate intervention		

Factually document below your rationale for checking any of the above critical criteria.

Scoring: All steps must be independently performed in correct sequence with appropriate timing and all starred (*) items must be explained/ performed correctly in order for the person to demonstrate competency. Any errors or omissions of these items will require additional practice and a repeat assessment of skill proficiency.

Rating: (Select 1)

☐ **Proficient**: The paramedic can sequence, perform and complete the performance standards independently, with expertise and to high quality without critical error, assistance or instruction.

☐ **Competent:** Satisfactory performance without critical error; minimal coaching needed.

☐ **Practice evolving/not yet competent:** Did not perform in correct sequence, timing, and/or without prompts, reliance on procedure manual, and/or critical error; recommend additional practice

CJM 8/17

Preceptor (PRINT NAME - signature