



<b>Performance Standard</b>		<b>7311</b>
<b>Effective</b> <b>April 1, 2018</b>		<b>Expires</b> <b>March 31, 2019</b>
Category I Skill – Low Frequency/High Risk: <b>ET Introducing Stylet</b>	Approval: Medical Director <b>Reza Vaezazizi, MD</b>	Signed
Applies To: <b>PM, MICN, BHP, EMS System</b>	Approval: REMSA Director <b>Bruce Barton</b>	Signed

**PURPOSE**

This performance standard is supplemental to the Performance Standard for Adult Orotracheal Intubation.

**Terminal Performance Objective**

To assist with the secure placement of an endotracheal tube (ETT) in the trachea to ensure a patent airway for positive pressure ventilation (PPV).

**Before using the ET introducing stylet to assist with intubation, paramedics must:**

1. Determine BLS airway adjuncts are inadequate for effective PPV and confirm the need for endotracheal intubation (ETI).<sup>1 2</sup>
2. Recognize signs of a difficult airway characterized by the presence of anatomic conditions which preclude direct visualization of the patient’s glottic opening (i.e., airway edema, arthritis, scoliosis of the spine, significant overbite, small mandible, short neck, morbid obesity, cervical spine immobilization, face or neck trauma)
3. Correctly assemble all equipment required for ETI within 60 seconds.
4. Provide optimal ventilation and oxygenation to the patient while ETI equipment is prepared.

**Contraindications**

1. DO NOT use the ET introducing stylet with endotracheal tubes smaller than 6.0 mm.

**Complications**

1. Complications of the ET tube introducing stylet may include:
  - Tracheal/esophageal perforation
  - Hemopneumothorax
  - Mediastinal emphysema
  - Right-sided pneumothorax

**Procedure**

1. Consider having a team member apply cricoid pressure while attempting intubation.
2. Perform laryngoscopy as per orotracheal intubation procedure, and obtain the best possible laryngeal view.
  - a. Use manual percutaneous laryngeal manipulation to assist with visualization of the glottic opening as needed.
3. While holding ET tube introducing stylet in right hand with the angled tip pointing upward, gently advance the ET tube introducer anteriorly (under the epiglottis) to the glottic opening (cords).
4. If able to visualize the vocal cords, direct through the cords.

<sup>1</sup> 2010 AHA Guidelines for CPR and ECC, Part 8 Adult Advanced Cardiovascular Life Support, pp S730-S735

<sup>2</sup> PHTLS , Seventh Edition, Chapter 7 Airway and Ventilation pp 144-145

5. If unable to visualize cords, direct the ET tube introducer to the anatomical area where the cords should be, and feel for a “washboard” sensation as the stylet tip ratchets on the tracheal rings.
6. Gently advance the device until resistance is encountered (at the carina).
  - a. NEVER force the stylet, as pharyngeal/tracheal perforation can occur.
  - b. **If no resistance is encountered and the entire length of the introducing stylet is inserted, the device is in the esophagus.**
7. The stylet is correctly placed when the device can be seen going through the cords, when ratcheting of the tip on the tracheal rings is felt, and/or when resistance is met after advancing (stylet is at the carina).
  - a. When using a marked stylet, withdraw the stylet back until the black line (or other such mark) is at the lips prior to advancing the ET tube, indicating distal tip is beyond vocal cords and proximal end has enough length to slide ET tube over it.
8. Once the stylet is positioned, advance the ET tube over the stylet and into the trachea.
9. If resistance encountered, withdraw the ET tube slightly, rotate 90 degrees and re-attempt. If unsuccessful, attempt with a smaller tube.
10. Once the ET tube is placed, maintain tube placement while removing introducer stylet.