ADVANCED LIFE SUPPORT SKILL **LOS ANGELES COUNTY EMS AGENCY**

ENDOTRACHEAL TUBE INTRODUCER

PERFORMANCE OBJECTIVES
The examinee will demonstrate the ability to use a tube introducer in a recognized difficult airway situation.

CONDITION
The examinee will be requested to perform an endotracheal (ET) intubation with an ET tube introducer on a simulated patient who has been identified as having a difficult airway. The examinee will be told they have already attempted one intubation. Aseptic technique will be used throughout procedure. An assistant knowledgeable in the use of a BVM device will assist as instructed. Necessary equipment will be adjacent to the simulated patient.

EQUIPMENT
Adult intubation manikin, variety of adult cuffed ET tubes size 5-9 mm, rigid suction catheter and tubing, suction device, oxygen tank with flow meter, oxygen tubing, BVM device, laryngoscope handle, straight and curved blades, stylet, 10 ml syringe, OP airway, NP airway, water soluble lubricant, tape, ET securing device, towel or small blanket, gloves and goggles.

PERFORMANCE CRITERIA

100% accuracy required on all items for training program skills testing.

Appropriate body substance isolation precautions must be instituted throughout the entire skill.

Maintain a clean environment for all ET equipment and sterility of ET tube

Patient must be ventilated between attempts.

Ventilation to ventilation must be completed within 30 seconds

NAME____________________DATE ___/___/___

Pass **Fail**

1st 2nd 3rd (final)

EXAMINER(S)_____________________________

SKILL	Yes/No	COMMENTS
Preparation		
1. Continue to take body substance isolation precautions.		
2. Confirm patient is being ventilated with 100% O_2 and has an OP airway in place		
3. Assemble all necessary equipment, including tube introducer		
4. Ensure suction device is available and working		
5. Select appropriate size ET tube		
6. Attach 10ml syringe to ET tube		
7. Check cuff for leaks -Inflate the cuff with 10ml -Remove the syringe -Feel the cuff for integrity while maintaining sterility -Reattach syringe and deflate the cuff -Leave the syringe with 10ml of air attached to the tube		
8. Lubricate the distal end of the ET tube with a water-soluble lubricant		
9. Attach the blade to the laryngoscope handle and ensure that the light is working		
10. Give instructions to assistant to prepare for: -Applying cricoid pressure -Handing the suction, tube introducer and ET tube -Time counts (20 seconds to see the cords, arytenoid cartilage or epiglottis, 30 seconds to place introducer and insert ET tube) -Attaching the CO2 detector to Bag-Valve device		

SKILL	Yes/No	COMMENTS
Procedure		
1. Position the patient's head & neck -No trauma-elevate occiput 1-2" and perform head-tilt chin lift -Trauma-neutral position with jaw-thrust		
2. Grasp laryngoscope with left hand		
3. Instruct assistant to stop ventilating and begin timing		
4. Open the patient's mouth using thumb pressure on the chin and remove OP airway		
5. Apply cricoid pressure		
6. Insert the blade into the mouth using the appropriate technique of the blade being utilized and suction as needed		
7. Advance the blade while visualizing the blade tip		
8. Attempt to visualize the vocal cords and suction, as needed		
9. Have assistant hand tube introducer into laryngoscopist's right hand		
10. Holding introducer in right hand and the angled tip upward, advance gently anterior of the arytenoid cartilage and under the epiglottis through the glottic opening (Note: If vocal cords are visualized direct introducer through the cords)		

ENDOTRACHEAL TUBE INTRODUCER

VERBAL TEST ITEMS: (Optional)

INDICATIONS

-Inability to visualize the vocal cords

-Inability to intubate using standards techniques

CONTRAINDICATIONS

-Not to be used in patients under 14 years of age

COMPLICATIONS

-Damage to the esophagus or trachea
-Delay in ventilations

NOTES:

Correct placement of the introducer is assumed by:

-direct visualization of the device going through the vocal cords; or

-resistance is met at the carina; or

-the tip is felt vibrating against the tracheal rings

Assistant should be an individual who has been trained ahead of time due to the complexity of steps

Procedure (Con't)

11. Insert the introducer until it can no longer be advanced or vibrations are felt

    -If no resistance is encountered and the entire length of the introducer is inserted, the device is in the esophagus. Remove and redirect.

    -If resistance is met, slowly withdrawal introducer while feeling for vibrations from the tracheal rings. "washboard" effect
    -Withdrawal until the thick black line is at the lip line

12. While continuing to visualize the introducer and maintaining an open airway with laryngoscope, the larygoscopist directs the assistant to place the ET tube over the introducer and advance the tube until the larygoscopist directs them to stop.

13. The larygoscopist takes control of the tube while the assistant helps stabilize the introducer.

14. The larygoscopist advances the tube until the cuff is in the oropharynx and under the epiglottis (Note: If resistance is met rotate the ET tube 90 degrees counterclockwise and attempt to advance)

15. The tube should be advanced until:

    -it is between 21-23 cm at the lip line (male); or
    -it is between 19-22 cm at the lip line (female)

16. While maintaining control of the tube remove the laryngoscope

17. Obtain a "scissors " grip on the ET tube

18. Inflate cuff with 10ml of air and remove syringe

19. Direct assistant to remove the tube introducer

20. Place CO_2 detector to Bag-Valve device

21. Follow protocols for tube placement verification

22. Secure tube

23. Reassess patient

24. Dispose of equipment following local/departmental protocols