Nasotracheal Intubation (≥ PL5)

Clinical Indications:

1. A spontaneously breathing patient in need of intubation due to inadequate respiratory effort, evidence of hypoxia or carbon dioxide retention, or need for airway protection.
2. Rigidity or clenched teeth prohibiting other airway procedures.

Contraindications:

1. Non-breathing or near apneic patient.
2. Patient less than 12 years of age.
3. Known or likely fracture or instability of mid-face secondary to trauma.
4. Anytime a less invasive maneuver would allow oxygenation and ventilation of the patient.

Relative Contraindications:

1. Blood clotting abnormalities
2. Anticoagulant use
3. Nasal polyps
4. Upper neck hematomas or infections
5. Acutely hypertensive patients
6. Patients suspected of experiencing elevated intracranial pressure

Procedure:

1. Prepare, position and oxygenate the patient with 100% oxygen.
2. Choose proper ET tube about 1mm less than for oral intubation.
3. Two sprays of Neo-Synephrine (phenylephrine) should be applied to the appropriate nostril. If needed Hurricane topical anesthetic, ½ second spray may be instilled in the posterior pharynx and repeated x 1.
4. Lubricate ET tube generously with water-soluble lubricant such as Lidocaine Jelly.
5. Pass the tube in the largest nostril, perpendicular to the facial plate following the curvature of the airway.
6. Use forward, lateral back and forth rotating motion to advance the tube. Never force the tube.
7. Continue to advance the tube noting air movement through it; use the BAAM whistle to assist.
8. Apply firm cricoid pressure; advance the tube quickly past the vocal cords during inspiration.
9. Inflate the cuff with 5 - 10 cc of air.
10. Apply $EtCO_2$ monitor. After 3 ventilations, $EtCO_2$ must be >10. If less than 10 check for adequate circulation and check equipment. Remove the ET tube if $EtCO_2$ remains <10 in the absence of a physiologic explanation. Record initial, ongoing, and final $EtCO_2$ values.
11. Auscultate for absence of sounds over epigastrium and presence of equal bilateral breath sounds. If present unilaterally/unequal, adjust tube position and consider whether this may be patient's baseline. If unsure of placement, remove tube and ventilate with bag-valve mask.
12. If $EtCO_2$ equipment failure occurs, use other means for confirmation.
13. Secure the tube to the patient's face.
14. Reassess airway, breath sounds, and $EtCO_2$ after transfer to the stretcher and during transport. These tubes are easily dislodged and require close monitoring and frequent reassessment.
15. Complete the airway verification form on arrival at destination.
16. Document ETT size, depth of insertion, time of successful intubation and number of attempts. Document confirmation of the ETT by presence of breath sounds, absence of sounds over the epigastrum, $EtCO_2$, and any/all additional methods of confirmation. Reconfirm correct placement after each patient movement.
17. Consider gastric distention and place an NG/OG tube after airway is secured with ETT.
18. Providers may continue to use backboards to assist in patient movement as needed.
19. Document in ePCR confirmation indications of successful intubation.