

## **Standard operating procedure for endotracheal (ET) tube**

1. Explain the procedure to the patient or their caregiver and obtain informed consent, if possible.
2. Equipment: Appropriate sized endotracheal tube, laryngoscope with a Miller or Macintosh blade, stylet, syringe (10-20mL), bag-valve-mask device, tape, and a securing device (e.g., tube holder).
3. Perform hand hygiene and put on sterile gloves, a surgical mask, and eye protection.
4. Ensure proper positioning of the patient with the head extended and the neck slightly flexed, using a headrest or rolled towel under the shoulders to align the oral, pharyngeal, and laryngeal axes.
5. Pre-oxygenate the patient with 100% supplemental oxygen, either via a face mask or bag-valve-mask device, for several breaths.
6. Insert the laryngoscope into the patient's mouth and lift the tongue and epiglottis gently to visualize the vocal cords.
7. Select the appropriate-sized endotracheal tube and verify its integrity
8. Insert the stylet into the endotracheal tube, bending it to match the curvature of the tube.
9. With the non-dominant hand, grasp the endotracheal tube near the beveled end and gently insert it between the vocal cords into the trachea while visualizing the glottis through the laryngoscope.
10. Advance the endotracheal tube until the cuff passes through the vocal cords, then remove the stylet carefully.
11. Confirm proper placement by auscultating bilateral breath sounds over the lung fields, while ensuring there is no air leak during positive-pressure ventilation.
12. Secure the endotracheal tube in place with adhesive tape or a tube holder, taking care not to occlude the ventilation ports or dislodge the tube.
13. Connect the endotracheal tube to the bag-valve-mask device or mechanical ventilator and initiate controlled ventilation, ensuring proper technique and monitoring the patient's response.
14. Confirm endotracheal tube placement using additional methods such as capnography or chest X-ray, as per institutional guidelines.
15. Document the procedure, including the size and location of the endotracheal tube, confirmation methods used and any complications or difficulties encountered.
16. Provide ongoing monitoring and care for the patient, ensuring secure positioning of the endotracheal tube, assessing for proper ventilation and oxygenation, and maintaining appropriate levels of sedation and analgesia.