



Must initially be reviewed/performed with Primary RN supervision in the unit.

Purpose: Endotracheal suctioning of an intubated patient withdraws secretions from the airway and prevents tube occlusion. Suctioning decreases respiratory effort, improves oxygenation, prevents complications of secretion accumulation, and collects airway samples for testing.

Considerations: Risks and benefits, inclusion/exclusion local protocols

Resource: [Dynamic Health Resource and Video](#)

Go to: Dynamic Health Endotracheal Suctioning Using The Closed-Suction Technique In Intubated Adults for more information

Supplies

- ☐ Nonsterile gloves
- ☐ Other personal protective equipment (PPE), such as a mask and eye shield or mask and goggles, if you anticipate exposure to bodily fluids
- ☐ Manual resuscitation bag with PEEP, as appropriate
- ☐ T-piece adapter
- ☐ Closed-suction catheter of appropriate size between 10 Fr and 16 Fr
- ☐ Open-suction catheter to clear secretions from the oropharyngeal area
- ☐ Sterile saline or sterile water in 1-L bottle or single-use lavage vials
- ☐ Sterile container
- ☐ Suction source, canister, and tubing
- ☐ Pulse oximeter
- ☐ Pain assessment tool, facility approved
- ☐ Written materials, if available, to reinforce verbal education





INLINE SUCTIONING STEPS

PROCEDURE STEPS:

1. Assess the patient for clinical indications for suctioning, such as the presence of secretions.
2. Connect the T-piece adapter to the endotracheal tube, as needed.
3. Attach the suction tubing to the closed-suction system if needed.
4. Twist the suction button on the suction catheter to unlock.
5. Silence ventilator alarms.
6. **Hyperoxygenate the patient** who experiences a significant drop in oxygenation with suctioning, who has clinical evidence of hypoxia or impaired cerebral circulation, or per facility protocol. Do EITHER of the following:
 - Press the mechanical ventilator 100% oxygen hyperventilation button with your non-dominant hand.
 - Have a colleague provide manual ventilation of 100% oxygen for 5-6 breaths over 30-60 seconds.
7. Use your non-dominant hand to secure the endotracheal tube.
8. Use your dominant hand to insert the suction catheter into the endotracheal tube, without applying suction.
 - **(Shallow suctioning) Insert to the predetermined distance or (Deep Suctioning) until resistance is met.**
 - **If inserted until resistance is met, use your dominant hand to pull the suction catheter back 1-2 cm / 0.4-0.8 inches.**
9. Use the thumb of your dominant hand to intermittently depress the suction button while slowly withdrawing the catheter.
10. **Apply suction for no more than 15 seconds.**
11. Assess sputum color, consistency, and quantity.
12. **Withdraw the suction catheter completely into the plastic enclosure.**
13. **Provide the patient a brief rest period of 30-60 seconds to recover after suctioning.**
14. Assess for clinical indicators, such as visible or audible secretions and decreased oxygen saturation, that warrant repeating the procedure.
15. **Hyperoxygenate the patient for 60 seconds. Repeat the suction process 1 or 2 more times as clinically indicated.**
16. Confirm ventilator alarms are reset and audible.