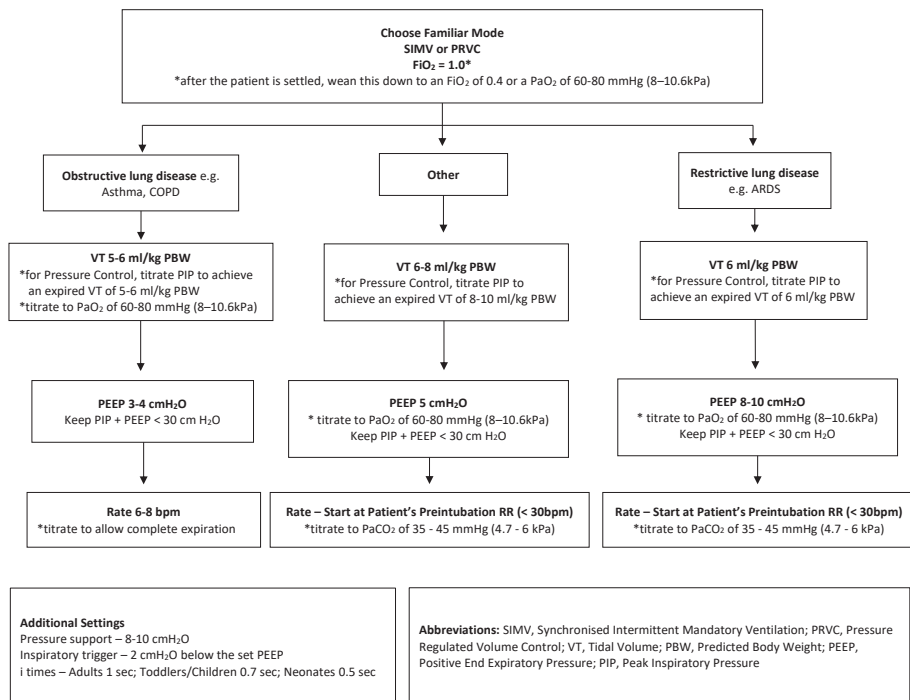


Guidelines for Initiation of Mechanical Ventilation Algorithm

This clinical pathway is intended to supplement, rather than substitute for, professional judgment and may be changed depending upon a patient's individual needs. Failure to comply with this pathway does not represent a breach of the standard of care.

***Non-invasive ventilation is NOT RECOMMENDED if patient is NOT in a negative pressure / isolated room**



The Crashing Intubated Patient (Peri-Arrest or Arrest):

DOPES then **DOTTS**: The first mnemonic is how to diagnose the problem and the second mnemonic is how to fix the problem:

Diagnosing the Problem:

- D** = Displaced Endotracheal Tube or Cuff
- O** = Obstructed Endotracheal Tube: Patient biting down, kink in the tube, mucus plug
- P** = Pneumothorax
- E** = Equipment Check: Follow the tubing from the ETT back to the ventilator and ensure everything is connected
- S** = Stacked Breaths: Auto-PEEP. Patient unable to get all the air out from their lungs before initiating the next breath. Inspiratory time is much shorter than expiratory time (I/E ratio is anywhere from 1 to 3 or 1 to 4)

Fixing the Problem (Once you commit to this, do every step even if you fix the problem with one of the earlier letters):

- D** = Disconnect the Patient from the Ventilator: This fixes stacked breaths by decreasing intra-thoracic pressure and improving venous return
- O** = O₂ 100% Bag Valve Mask: The provider should bag the patient not anyone else because this lets you get a sense of what the potential problem is. Look, Listen, and Feel
 - Look: Watch the chest rise and fall, look at ETT and ensure it is the same level it was at when it was put in
 - Listen: Air leaks from cuff rupture or cuff above the cords; Bilateral breath sounds; Prolonged expiratory phase
 - Feel: Feel the pressure of pilot balloon of endotracheal tube, crepitus; How is the patient bagging (Hard to bag or too easy to bag)
- T** = Tube Position/Function: Suction catheter to ensure tube is patent; Can also use bougie if you don't have suction catheter, but be gentle (if too aggressive can cause potential harms); Ensure the tube is at the same level it was at when it was put in
- T** = Tweak the Vent: Decrease respiratory rate, decrease tidal volume, decrease inspiratory time. Biggest bang for your buck is decreasing the respiratory rate. This may cause respiratory acidosis (permissive hypercapnia)
- S** = Sonography: You can diagnose things much faster than waiting for respiratory therapist to come to the bedside or waiting for stat portable chest x-ray to be done.