Ventilator Modes

Mode of Ventilation	Specifics	Application
Volume Control aka Assist Control	- Control Mode - Set tidal volume - Set rate - Patient can trigger a breath but the tidal volume will be the set volume with each breath - Not a weaning mode	- Normal Lungs being ventilated for other reasons - To decrease rate in tachynic patients - To decrease the work of breathing
Pressure Control (PC)	- Control Mode - Set rate - Set inspiratory pressure - Set inspiratory time (I-time) - Can breathe above set rate but will receive set parameters for each breath - Not a weaning mode	- High peak airway pressures - Lung Injury - Asthma exacerbation - Bronchospasm - Patients with a leak around - ETT - Patients who need a controlled I:E ratio
Pressure Regulated Volume Control (PRVC)	- Control Mode -Set rate, tidal volume, and I-time -Vent will work on a breath-to-breath basis to deliver the lowest possible pressure to reach the set tidal volume -Patient can breathe above the set rate but will receive the preset parameters for each breath	- Lung Injury - High peak airway pressures - Asthma Exacerbation - Tachypnea - To decrease work of breathing

Ventilator Modes Cont..

Mode of Ventilation	Specifics	Application
Pressure Support Ventilation (PSV)	- Support Mode - Each breath is determined by the patient (rate, tidal volume, and I-time) - Support levels will help facilitate weaning - Weaning Mode	- Intact respiratory drive - Patients with challenging ventilator needs - Spontaneous breathing but will require PEEP to prevent airway collapse - Prolonged phases of weaning - To prevent exhaustion during weaning
Bi Vent	- Combination mode - Set 2 pressure levels (P High and PEEP) - Set 2 Pressure Supports (PS above P High and PS above PEEP) - Set 2 time cycles (T HIGH and T PEEP) - Patients can spontaneously breath at any time during the cycles	- Lung Recruitment - Pulmonary Contusions - ARDS - Patients who need inverse I:E ratio that you do not want to paralyze
Synchronized Intermittent Mandatory Ventilation Volume Control with Pressure Support (SIMV/VC with PS)	- Combination mode - Mandatory breaths are delivered as described under VC/AC - Assisted breaths are triggered by the patient as described under PSV - Weaning mode	- Patients with some but not sufficient breathing capacity - Patients who need some breaths with a controlled tidal volume and I:E ratio - THIS MODE IS TRIED FIRST TO GET AND UNDERSTANDING OF THEIR NEEDS

Ventilator Modes Cont..

Mode of Ventilation	Specifics	Application
Synchronized Intermittent Mandatory Ventilation Pressure Control with Pressure Support (SIMV/ PC with PS)	- Combination mode - Mandatory Breaths are delivered as described under PC - Assisted breaths are triggered by the patient as described under PSV - Weaning Mode	- Patients whose - Variations in lung pressures and high peak airway pressures must be avoided - Patients with some byut not sufficient breathing capacity - Patients with leakage around the ETT - Patients who need a high initial flow rate to open up the closed lung compartments