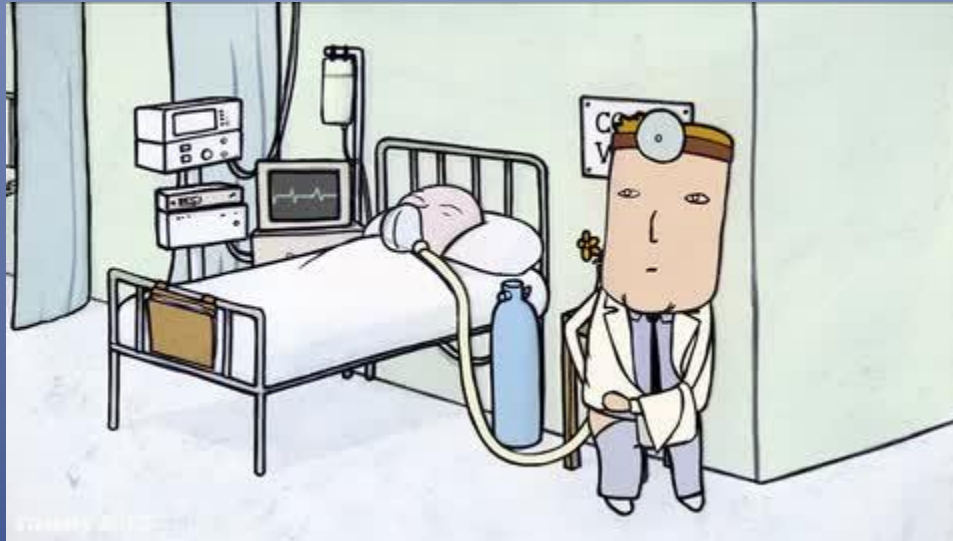
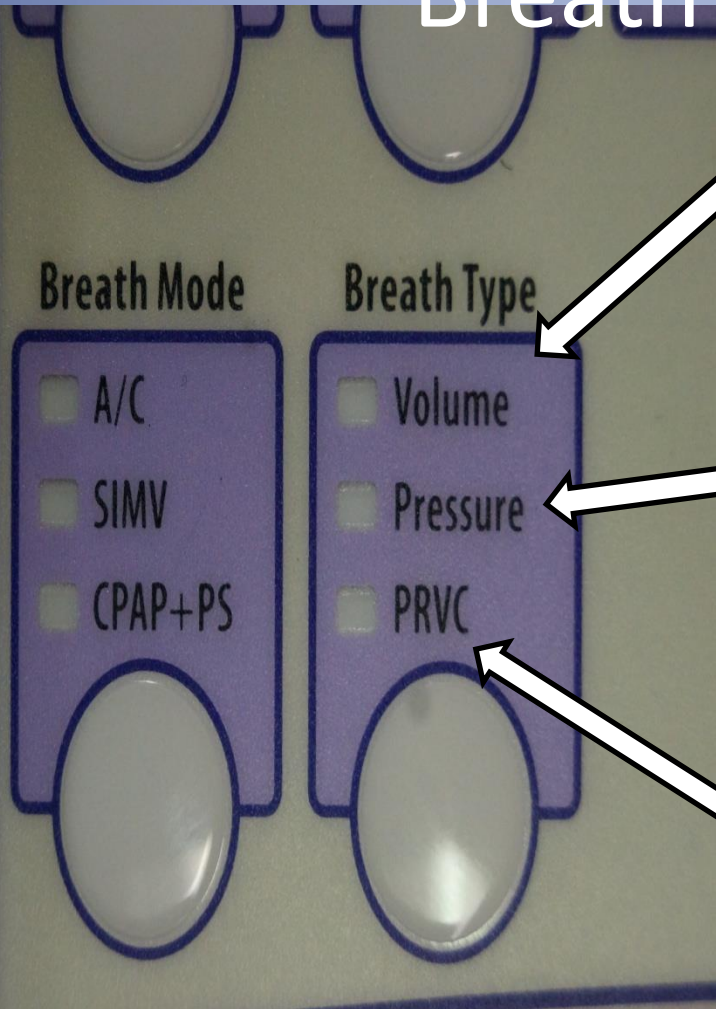


# Ventilator Breath Modes



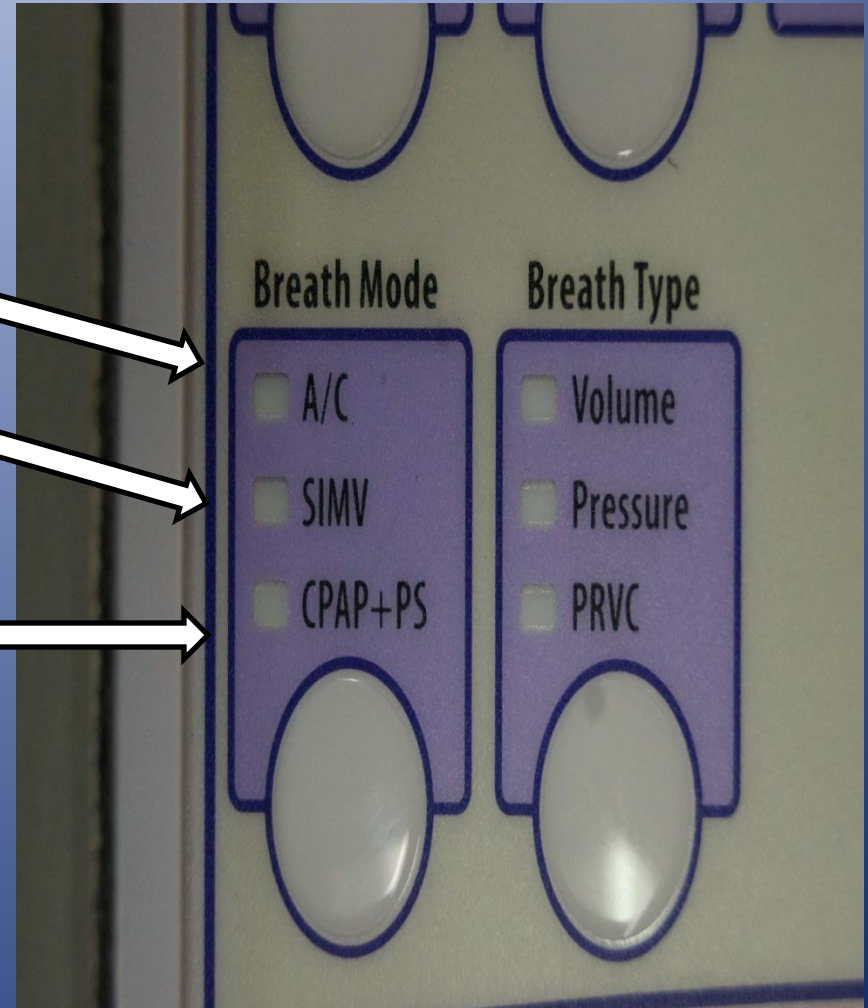
# Revel Breath Types are Different from Breath Modes!



- Volume Control
- Pressure Control
- Pressure Regulated Volume Control (PRVC)

# Revel Breath Modes

- Assist Control (A/C)
- Synchronized Intermittent Mandatory Ventilation (SIMV)
- Continuous Positive Airway Pressure + Pressure Support (CPAP+PS)



# Revel Breath Modes

## Assist Control

- Mode that provides a minimum # of breaths as set (**control**), but allows additional pt triggered breaths at set volume or pressure or Pressure Regulated Volume Control (PRVC) to be provided (**assist**).
- If cycle time elapses with out pt triggered breath, the machine will deliver a mandatory breath.
  - Clinician determines the minimum minute ventilation by setting volume or pressure or PRVC and respiratory rate.
  - Mode that requires least effort from patient.

# Synchronized Intermittent Mandatory Ventilation (SIMV)

- Mode used to assist pt's who have some, but not sufficient breathing and can be used for weaning.
  - Periodic assisted mechanical ventilations synchronized with the patients own breathing.
  - Ventilator will provide breath if pt fails to do so within the set interval.
  - Synchronization attempts to limit baro-trauma when a preset breath is delivered to a patient who has inhaled or is exhaling (breath stacking).
  - Ventilator detects pt's own breath and delays the machine breath.

# Synchronized Intermittent Mandatory Ventilation (SIMV)

- Unlike Assist Control (AC) ventilation, in SIMV any spontaneous breathing by pt does not result in a volume or pressure machine delivered breath- the patient gets what he/she can get for tidal volume.
  - SIMV can lead to a much higher work of breathing due to ineffective spontaneous ventilation.
  - Addition of Pressure Support, supplements ineffective spontaneous ventilation in SIMV mode.

# Continuous Positive Airway Pressure + Pressure Support (CPAP+PS)

- Basically PEEP
  - No set cycle time
  - Ventilator provides no breaths.
- Used mainly in Non-Invasive Positive Pressure Ventilation (NPPV), but may also be used with invasive ventilation.
- CPAP + PS: set level of pressure with the addition of pressure support level to supplement inspiratory pressure when spontaneous ventilations occur.
- Patient must have intact respiratory drive.

# May what to skip this Chinese Joint!

