**FLOW PATTERN:** this depends on the mode of control

- **SINUSOIDAL:** this smooth curve is seen in people who are breathing spontaneously, or on CPAP.
- **DECELERATING:** Flow is maximal initially and drops off to maintain the set pressure (in pressure-controlled ventilation). Volume fluctuates depending on compliance.
- **CONSTANT:** Flow is constant until the target volume is delivered. Pressure fluctuates depending on compliance.
- **ACCELERATING:** Flow RISES to a maximum until the set pressure is delivered... this is not used in humans, but a madman might ventilate a sperm whale in this way.

**BREATH TYPES:** what kind of breath will you take?

- **MANDATORY BREATH:** the machine just blew air into you.
- **ASSISTED BREATH:** You triggered the breath, but the machine decided everything else for you: the volume, the pressure, the flow pattern- you didn’t get any say in any of those. The definition is, that an assisted breath is **started by the patient, but finished by the machine**.
- **PRESSURE-SUPPORTED BREATH:** You triggered the breath, and you decide how much tidal volume to inhale. The machine decides what pressure to apply while you inhale, and it also decides the pressure limit (it will terminate the breath if the pressure limit is reached)
- **SPONTANEOUS BREATH:** The machine only gave you PEEP and pressure support; flow is controlled by you.

---

With "Basic Assessment and Support in Intensive Care" by Gomersall et al as a foundation. I built using the humongous and canonical "Principles and Practice of Mechanical Ventilation" by Tobins et al – the 1442 page 2nd edition.