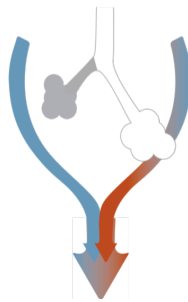


Airway and ventilation

USING POSITIVE PRESSURE BREATHING

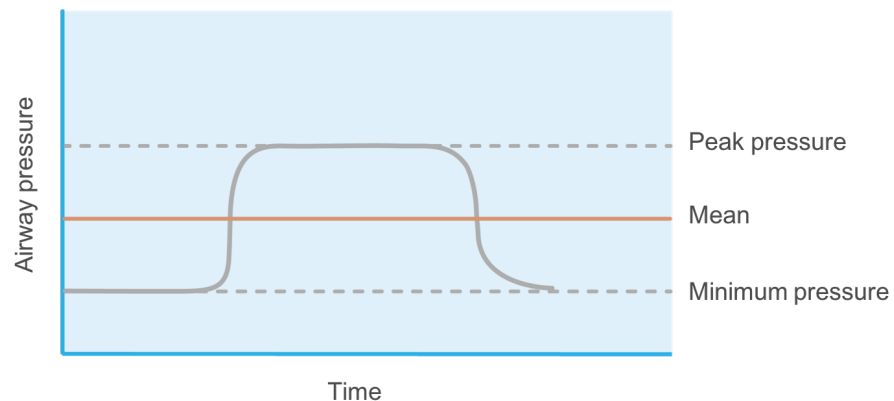
Most clinically-relevant cases of hypoxemia are caused by **pulmonary shunt**.



The most appropriate way to address this is to recruit the alveoli that are not participating in gas exchange, when possible. This is generally accomplished by increasing the **mean airway pressure**.

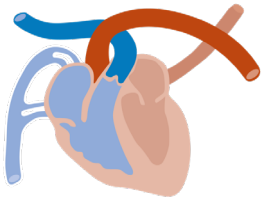
This can be done by

- Increasing the peak pressure (but at risk of barotrauma)
- Increasing the minimum pressure (**positive end-expiratory pressure, or PEEP**)
- Increasing the time at the peak pressure

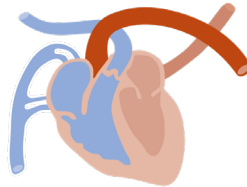


Increasing end-expiratory pressure can be accomplished with invasive or noninvasive mechanical ventilation, or a bag-valve-mask with the use of a PEEP valve.

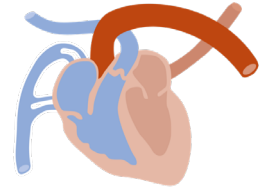


Hemodynamic effects of positive pressure ventilation include

Decreased preload



Increased right ventricle afterload



Decreased left ventricle afterload