

## Ventilator Tracings

## Plateau pressure and driving pressure

A volume control breath is shown with an inspiratory pause (common function on ICU ventilators). This allows pressure to equalize at the end of a breath to measure the plateau pressure (flat portion of the pressure tracing). Note how this is less than the peak inspiratory pressure (PIP). The plateau pressure can be used alone, or it can be used to calculate the driving pressure (plateau pressure - PEEP). Our goal is to decrease the plateau pressure or driving pressure to decrease the strain placed on the lung while receiving mechanical ventilation.

## Auto PEEP

If the patient has a prolonged exhalation or the respiratory rate so very high, the patient may not finish exhalation before the next breath is administered. This will create auto PEEP that is functionally additive to the set PEEP. An expiratory pause (common function on ICU ventilators), will delay the next breath and allow observation of the flow tracing not returning to zero prior to the next breath suggesting auto PEEP. Auto PEEP can often be treated by decreasing the inspiratory time (increasing the expiratory time), or decreasing the respiratory rate.