**ICU Ventilator Management Protocol Version 1 5/2314**

**Respiratory**

Ventilator settings: Initial Settings as ordered by provider or per Ventilator Initiation Standing Order

***Oxygenation Goal: PaO2 55-80 mmHg or SpO2 88-95%***

Use the incremental FiO2/PEEP combination below to achieve the Oxygenation goal

Higher FiO2/Lower PEEP :

FiO2 0.3/PEEP 5;

FiO2 0.4/PEEP 5;

FiO2 0.4/PEEP 8;

FiO2 0.5/PEEP 8;

FiO2 0.5/PEEP 10;

FiO2 0.6/PEEP 10;

FiO2 0.7/PEEP 10;

FiO2 0.7/PEEP 12;

FiO2 0.7/PEEP 14;

FiO2 0.8/PEEP 14;

FiO2 0.9/PEEP 14;

FiO2 0.9/PEEP 16;

FiO2 0.9/PEEP 18;

FiO2 1.0/PEEP 18-24

***Plateau Pressure (Pplat) Goal: less than or equal to 30 cm H2O***

Monitor Pplat (inspiratory pause) a minimum of every 4 hours and after each change in PEEP or tidal volume

If Pplat is greater than 30 mm H2O: decrease tidal volume by 1 milliliter/kilogram increments to a minimum 4 milliliters/kilogram

If Pplat less than 25 cm H2O and tidal volume is less than 6 milliters per kilogram: increase tidal volume by 1 milliliter/kilogram until Pplat is greater than 25 cm H2O or tidal volume is equal to 6 milliliters/kilogram

If Pplat is less than 30 mm H2O and breath stacking occurs: may increase tidal volume by 1 milliliter/kilogram increments to a maximum of 8 milliliters/kilogram if Pplat remains less than or equal to 30 cm H2O

***pH Goal: 7.30-7.45***

Acidosis Management (pH less than 7.30): If pH 7.15-7.30: increase respiratory rate until pH is greater than 7.30 or PaCO2 is less than 25 (maximum respiratory rate 35)

If pH is less than 7.15: increase respiratory rate to 35. If pH remains less than 7.15 Notify Provider and consider giving sodium bicarbonate

Alkalosis Management (pH greater than 7.45): If respiratory rate 30-35 decrease respiratory rate by 5. If respiratory rate 25-30 decrease respiratory rate by 4. If respiratory rate 20-25 decrease respiratory rate by 3

Blood gas, arterial prn and 30 minutes after each ventilator change