Respiratory MICU Ventilator Weaning Protocol

A UMC Health System Performance Improvement Initiative for use in MICU where patients requiring ventilator weaning receive care.

1. **DAILY SCREENING:** (All of the following conditions must be met)
   a. \( \text{FiO}_2 \leq 40\% \)
   b. PEEP \( \leq 5\text{ cmH}_2\text{O} \)
   c. Adequate cough during suctioning (intact airway reflexes)
   d. Minimal vasopressor agents (dopamine \( \leq 5\text{ mcg/kg/min} \) acceptable)
   e. Minimal sedative agents (intermittent dosing acceptable)
   f. Acceptable nutritional status

2. **Trial of spontaneous breathing:**

   **PERFORM CUFF LEAK TEST PRIOR TO PLACING ON CPAP**

   CPAP 5 with PS of 5 cmH\text{O} for 2 hours

3. **Trial will be stopped if ANY of the following conditions are observed:**
   a. RR > 35 breath/minute for > 5 minutes
   b. \( \text{SaO}_2 < 90\% \)
   c. HR > 140 beats/minute
   d. Sustained increase or decrease in HR by \( \geq 20\% \)
   e. Systolic BP > 180 mmHg or < 90 mmHg
   f. Increased anxiety
   g. Diaphoresis

   - If any of the above condition are observed the trial is considered unsuccessful go back to previous ventilator settings
   - If any of the above condition are not observed the trial is considered successful; obtain:
     a. **Rapid Shallow Breathing Index** (spontaneous RR/VT) should be <105
     b. **Weaning Parameters**

4. Physician will be notified after the 2 hours of spontaneous breathing trial, and a decision for extubation will be discussed.

**NOTE:** If the trial is stopped, the patient will be reassessed for weaning tolerance the next morning. Once the MICU weaning is ordered, the patient will be assessed **DAILY** for weaning tolerance until extubated.