

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. $FiO_2 \leq 40\%$
- 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_2O 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. $SaO_2 < 90\%$
 - c. $HR > 140$ beats/minute
 - d. Sustained increase or decrease in HR by $\geq 20\%$
 - e. Systolic BP $> 180 \text{ mmHg}$ or $< 90 \text{ mmHg}$
 - 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.