

**PARKLAND HEALTH & HOSPITAL SYSTEM
LEADERSHIP & ORGANIZATIONAL DEVELOPMENT**

**COMPETENCY VALIDATION
MECHANICAL VENTILATION**

Name: _____ ID#: _____

Unit: _____ Date: _____

Mechanical Ventilation Please circle type: Drager T-Bird	1 st Attempt (P or F)	2 nd Attempt (P or F)	Comments
1. Performs a ventilator check, identifying:			
A. Style (Volume or Pressure)			
B. Mode (AC, SIMV, or CPAP)			
C. Rate			
D. FiO ₂ (Fraction of Inspired Oxygen)			
E. PEEP (Positive End Expiratory Pressure)			
F. V _T (Tidal Volume)			
G. PIP (Peak Inspiratory Pressure)			
2. Assess Exhaled Tidal Volume			
3. ICU's: Assess plateau pressure using inspiratory pause (or states would obtain information from Respiratory Therapist)			
4. ICU's: Calculates static effective compliance using the following formula: V _T / (plateau pressure – PEEP)			
5. Checks alarm settings:			
A. High pressure alarm set ≤ 20 cm H ₂ O above patient's PIP			
B. Low pressure alarm set ≥ 15 cm H ₂ O below patient's PIP (Drager intrinsically sets 5 cm H ₂ O above set PEEP)			
C. High minute volume alarm set ≤ 5 above set or average patient's baseline minute volume			
D. Low minute volume ≥ 80% of set V _T or ≥ 3 Liter/minute			
6. States 4 of the following troubleshooting techniques for the High Pressure Alarm:			
A. Suction the patient			
B. Checks for biting the tube or agitation			
C. Auscultates for breath sounds (listening for pneumothorax or right mainstem intubation)			
D. Empties water from the tubing			
E. Checks for kinks in the tubing			
F. Repositions the patient's head			
7. States 3 of the following troubleshooting techniques for the Low Pressure, Low Minute Volume, or Low Exhaled V _T Alarms			
A. Assess exhaled tidal volume			
B. Checks connections			
C. Checks for cuff leak			
D. Checks for extubation			
E. Checks if pressure alarms are set appropriately if applicable			

The completion of this form validates the above nurse's competency for this skill.

#1 Pass / Fail Competency Validator Signature: _____

#2 Pass / Fail Competency Validator Signature: _____